



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 82

[EPA-HQ-OAR-2011-0354; FRL-9797-5]

RIN 2060-AQ98

Protection of Stratospheric Ozone: Adjustments to the Allowance System for Controlling HCFC Production, Import, and Export

AGENCY: Environmental Protection Agency [EPA].

ACTION: Final rule.

SUMMARY: EPA is adjusting the allowance system controlling U.S. consumption and production of hydrochlorofluorocarbons (HCFCs) as a result of a 2010 Court decision vacating a portion of the 2009 final rule titled “Protection of Stratospheric Ozone: Adjustments to the Allowance System for Controlling HCFC Production, Import, and Export.” EPA interprets the Court’s vacatur as applying to the part of the rule that establishes the company-by-company baselines and calendar year allowances for HCFC-22 and HCFC-142b. On August 5, 2011, EPA published an interim final rule allocating allowances for 2011. Today’s action relieves the regulatory ban on production and consumption of these two chemicals following the Court’s vacatur by establishing company-by-company HCFC-22 and HCFC-142b baselines and allocating production and consumption allowances for 2012-2014.

DATES: This final rule is effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: EPA has established a docket for this action under Docket ID No. **EPA-HQ-OAR-2011-0354**. All documents in the docket are listed on the www.regulations.gov website.

Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted

material, is not placed on the Internet and will be publicly available only in hard copy form.

Publicly available docket materials are available either electronically through

www.regulations.gov or in hard copy at the Air and Radiation Docket and Information Center, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air and Radiation Docket is (202) 566-1742.

FOR FURTHER INFORMATION CONTACT: Luke H. Hall-Jordan by telephone at (202) 343-9591, or by e-mail at hall-jordan.luke@epa.gov, or by mail at U.S. Environmental Protection Agency, Stratospheric Protection Division (6205J), 1200 Pennsylvania Ave., NW, Washington, DC, 20460. You may also visit the website of EPA's Stratospheric Protection Division at www.epa.gov/ozone/strathome.html for further information about EPA's Stratospheric Ozone Protection regulations, the science of ozone layer depletion, and related topics.

SUPPLEMENTARY INFORMATION:

Effective Date. This rule concerns Clean Air Act (CAA) restrictions on the consumption and production of hydrochlorofluorocarbon (HCFC)-22 and HCFC-142b during 2012-2014. Section 553(d) of the Administrative Procedure Act (APA), 5 U.S.C. Chapter 5, generally provides that rules may not take effect earlier than 30 days after they are published in the Federal Register. EPA is issuing this final rule under section 307(d)(1) of the Clean Air Act, which states: "The provisions of section 553 through 557 . . . of Title 5 shall not, except as expressly provided in this section, apply to actions to which this subsection applies." Thus, section 553(d) of the APA does not apply to this rule. EPA is nevertheless acting consistently with the policies underlying APA section 553(d) in making this rule effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]. APA section 553(d) allows an effective date

less than 30 days after publication for any action “that grants or recognizes an exemption or relieves a restriction,” (5 U.S.C. 553(d)(1)). Since today's action relieves a restriction from the regulatory ban on the production and consumption of HCFC-22 and HCFC-142b in the U.S., EPA is making this action effective immediately upon publication to ensure the availability of these HCFCs for servicing air conditioning and refrigeration equipment.

Acronyms and Abbreviations. The following acronyms and abbreviations are used in this document.

CAA – Clean Air Act

CAAA – Clean Air Act Amendments of 1990

CFC – Chlorofluorocarbon

CDM – Clean Development Mechanism

CFR – Code of Federal Regulations

EPA – Environmental Protection Agency

FR – Federal Register

HCFC – Hydrochlorofluorocarbon

HVAC – Heating, Ventilating, and Air Conditioning

Montreal Protocol – *Montreal Protocol on Substances that Deplete the Ozone Layer*

MOP – Meeting of the Parties

MT – Metric Ton

ODP – Ozone Depletion Potential

ODS – Ozone-Depleting Substances

Party – States and regional economic integration organizations that have consented to be bound by the *Montreal Protocol on Substances that Deplete the Ozone Layer*

Organization of This Document. The following outline is provided to aid in locating information in this preamble.

- I. Does This Action Apply to Me?
- II. Summary of This Final Action
- III. Background
 - A. How Does the Montreal Protocol Phase Out HCFCs?
 - B. How Does the Clean Air Act Phase Out HCFCs?
 - C. What Sections of the Clean Air Act Apply to This Rulemaking?
 - D. How Does This Action Relate to the 2010 Court Decision?
- IV. How Is EPA Allocating HCFC-22 and HCFC-142b Allowances for 2012-2014?
 - A. What Baselines Is EPA Using for HCFC-22 and HCFC-142b Allowances?
 - 1. What Baselines Is EPA Using for 2012-2014?
 - 2. What Baselines Is EPA Considering for 2015-2019?
 - B. What Factors Did EPA Consider in Determining Allocation Amounts for HCFC-22 and HCFC-142b?
 - 1. How Is EPA Adjusting Estimated Servicing Need to Account for Surplus Inventory from Past Years?
 - 2. How Is EPA Adjusting Allowances to Encourage Recovery, Reclamation and Reuse?
 - 3. How Is EPA Accounting for Recovery and Reuse of HCFC-22 in the Supermarket Industry?
 - 4. Did EPA Consider Providing Allowances to Small Businesses in This Final Action?
 - 5. Does the Installation of Dry-shipped HCFC-22 Equipment Affect the Phaseout of HCFC-22?
 - 6. How Is EPA Addressing the Court's Decision with Regard to 2010 HCFC Allowances?
 - 7. Does EPA Have to Provide the Same Percentage of Baseline for Production Allowances as It Does for Consumption Allowances?
 - C. How Many HCFC-22 and HCFC-142b Allowances Is EPA Allocating in 2012-2014?
 - 1. How Many HCFC-22 Consumption Allowances Is EPA Allocating in 2012-2014?
 - 2. How Many HCFC-22 Production Allowances Is EPA Allocating in 2012-2014?
 - 3. How Many HCFC-142b Consumption and Production Allowances Is EPA Allocating in 2012-2014?
 - 4. How Does the Aggregate Allocation for HCFC-22 and HCFC-142b Translate Entity-by-Entity?
- V. How Is EPA Changing the Regulations Governing Transfers of Class II Allowances?
 - A. How Is EPA Changing the Regulations Governing Permanent Transfers of Class II Allowances?
 - B. How Is EPA Changing the Regulations Governing Transfers of Article 5 Class II Allowances?
- VI. Statutory and Executive Order Reviews
 - A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

- B. Paperwork Reduction Act
- C. Regulatory Flexibility Act
- D. Unfunded Mandates Reform Act
- E. Executive Order 13132: Federalism
- F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments
- G. Executive Order 13045: Protection of Children from Environmental Health and Safety Risks
- H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use
- I. National Technology Transfer and Advancement Act
- J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- K. Congressional Review Act

I. Does This Action Apply to Me?

This rule may affect the following categories:

- Industrial Gas Manufacturing entities (NAICS code 325120), including fluorinated hydrocarbon gases manufacturers and reclaimers;
- Other Chemical and Allied Products Merchant Wholesalers (NAICS code 422690), including chemical gases and compressed gases merchant wholesalers;
- Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing entities (NAICS code 333415), including air-conditioning equipment and commercial and industrial refrigeration equipment manufacturers;
- Air-Conditioning Equipment and Supplies Merchant Wholesalers (NAICS code 423730) , including air-conditioning (condensing unit, compressors) merchant wholesalers;
- Electrical and Electronic Appliance, Television, and Radio Set Merchant Wholesalers (NAICS code 423620), including air-conditioning (room units) merchant wholesalers; and

- Plumbing, Heating, and Air-Conditioning Contractors (NAICS code 238220), including central air-conditioning system and commercial refrigeration installation; HVAC contractors.

This list is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that could potentially be regulated by this action. Other types of entities not listed in this table could also be affected. To determine whether your facility, company, business organization, or other entity is regulated by this action, you should carefully examine these regulations. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the “**FOR FURTHER INFORMATION CONTACT**” section.

II. Summary of This Final Action

In today’s final rule, EPA is issuing HCFC-22 and HCFC-142b allowances for the years 2012, 2013 and 2014 in the wake of the U.S. Court of Appeals for the District of Columbia Circuit (Court) decision in *Arkema v. EPA* (618 F.3d 1, D.C. Cir. 2010). As discussed in this preamble and in the proposed rule (77 FR 237), the Court vacated HCFC-22 and HCFC-142b company-by-company baseline and calendar-year allowances for 2012-2014. Baselines and calendar-year allowances for these two substances were originally finalized in a December 15, 2009, rule (“2009 Final Rule,” 74 FR 66412).

EPA is finalizing HCFC-22 and HCFC-142b baseline allowances that incorporate the inter-pollutant transfers made by Arkema, Inc., Solvay Fluorides, LLC, and Solvay Solexis, Inc., (Arkema and Solvay) in 2008, and is setting calendar-year allowances for the 2012-2014 control periods. EPA is providing fewer calendar-year HCFC-22 consumption allowances¹ and more calendar-year HCFC-22 production allowances² than in the 2009 Final Rule. The agency

¹ Consumption allowances permit an entity to produce and/or import virgin HCFCs in a given control period (i.e., calendar year).

² Production allowances permit an entity to produce virgin HCFCs in a given control period. Domestic production of HCFCs requires the use of both production and consumption allowances.

determined that the need for virgin HCFC-22 in the U.S. is lower than EPA anticipated in the 2009 Final Rule and is adjusting consumption allowances accordingly. EPA anticipates this adjustment will foster a smooth transition away from ozone-depleting HCFC-22. While EPA is reducing domestic consumption (i.e. production and import for U.S. use), under the recalculated baselines, the overall production allowances will increase. Because other countries have different approaches to phasing out HCFC-22, EPA considers that this increase in the number of production allowances will also ensure that U.S. companies can continue to meet demand for HCFCs in global markets. This supports the Montreal Protocol's overall goal of limiting need for new production capacity for controlled chemicals by allowing existing producers scope to better meet the needs of global markets. Additionally, EPA has determined that in the narrow circumstance of the Court's vacatur of the baselines in the 2009 Final Rule, it must provide meaningful compensation for 2010 calendar-year HCFC-22 and HCFC-142b allowances that companies would have received under the adjusted baselines. EPA will issue recoupment allowances for that purpose in 2013 and 2014.

EPA is also updating HCFC-142b baselines and annual allowances and is allocating approximately the same amount of calendar-year consumption allowances as in the 2009 Final Rule. Due to the recalculation of HCFC-142b baselines, calendar-year HCFC-142b production allowances are higher than in the 2009 Final Rule, but have been calculated using the same methodology. Therefore, while the percentage of baseline issued for HCFC-142b is the same for both consumption and production allowances, the recalculated production baseline is now significantly larger than the consumption baseline, resulting in an overall increase in calendar-year production allowances compared with the 2009 Final Rule.

Finally, EPA is modifying the transfer language at 40 CFR 82.23 to more explicitly reflect EPA's policy on inter-pollutant HCFC allowance transfers; that is, that inter-pollutant HCFC transfers can occur only on an annual basis going forward.

All other aspects of the 2009 Final Rule not addressed in this rulemaking are unaffected, including, but not limited to: HCFC-123, HCFC-124, HCFC-225ca and HCFC-225cb allowances, the formula for determining calendar-year Article 5 allowances, and the use and introduction into interstate commerce restrictions on HCFC-22 and HCFC-142b. This preamble includes a summary of comments EPA received in response to the proposed rule, as well as comments to the 2011 Interim Final Rule that are relevant to this current rulemaking. A full response to comments document (“Response to Comments”) is available in the docket for this rulemaking.

III. Background

EPA is undertaking this rulemaking as a result of the decision issued by the Court in *Arkema v. EPA* (618 F.3d 1, D.C. Cir. 2010) regarding the December 15, 2009, final rule titled “Protection of Stratospheric Ozone: Adjustments to the Allowance System for Controlling HCFC Production, Import, and Export,” (“2009 Final Rule,” 74 FR 66412). Certain allowance holders affected by the 2009 Final Rule filed petitions for judicial review of the rule under section 307(b) of the Clean Air Act. Among other arguments, the petitioners contended that the rule was impermissibly retroactive because in setting the baselines for the new regulatory period, EPA did not take into account certain inter-pollutant baseline transfers that petitioners had performed during the prior regulatory period.

The Court issued a decision on August 27, 2010, agreeing with petitioners that “the [2009] Final Rule unacceptably alters transactions the EPA approved under the 2003 Rule,” (*Arkema v. EPA*, 618 F.3d at 3). The Court vacated the 2009 Final Rule in part, “insofar as it operates retroactively,” and remanded it to EPA “for prompt resolution,” (618 F.3d at 10). The Court withheld the mandate for the decision pending the disposition of any petition for rehearing. EPA’s petition for rehearing was denied on January 21, 2011. The mandate issued on February 4,

2011. More detail is provided on the case and EPA’s interpretation of the Court’s decision in section III.D. of this preamble.

For 2011, EPA addressed the Court’s partial vacatur in an August 5, 2011, interim final rule, “Protection of Stratospheric Ozone: Adjustments to the Allowance System for Controlling HCFC Production, Import, and Export,” (“2011 Interim Final Rule,” 76 FR 47451). Today’s final rule follows that action, and establishes a path forward for the remainder of the regulatory period ending on December 31, 2014.

A. How Does the Montreal Protocol Phase Out HCFCs?

The *Montreal Protocol on Substances that Deplete the Ozone Layer* (Montreal Protocol) is the international agreement aimed at reducing and eventually eliminating the production and consumption of stratospheric ozone-depleting substances (ODS). The U.S. was one of the original signatories to the 1987 Montreal Protocol and the U.S. ratified the Protocol on April 12, 1988. Congress then enacted, and President George H.W. Bush signed into law, the Clean Air Act Amendments of 1990 (CAAA), which included Title VI on Stratospheric Ozone Protection, codified as 42 U.S.C. Chapter 85, Subchapter VI, to ensure that the U.S. could satisfy its obligations under the Montreal Protocol. Title VI includes restrictions on production, consumption, and use of ODS that are subject to acceleration if “the Montreal Protocol is modified to include a schedule to control or reduce production, consumption, or use . . . more rapidly than the applicable schedule” prescribed by the statute (CAA §606). Both the Montreal Protocol and the Clean Air Act (CAA) define consumption as production plus imports minus exports.

In 1990, as part of the London Amendment to the Montreal Protocol, the Parties identified HCFCs as “transitional substances” to serve as temporary, lower ozone depletion potential (ODP) substitutes for CFCs and other ODS. EPA similarly viewed HCFCs as “important interim substitutes that will allow for the earliest possible phaseout of CFCs and other

Class I substances”³ (58 FR 65026). In 1992, through the Copenhagen Amendment to the Montreal Protocol, the Parties created a detailed phaseout schedule for HCFCs beginning with a cap on consumption for industrialized countries not operating under Article 5 of the Montreal Protocol (non-Article 5 Parties), a schedule to which the U.S. adheres. The consumption cap for each non-Article 5 Party was set at 3.1 percent (later tightened to 2.8 percent) of a Party’s CFC consumption in 1989, plus a Party’s consumption of HCFCs in 1989 (weighted on an ODP basis). Based on this formula, the HCFC consumption cap for the U.S. was 15,240 ODP-weighted metric tons (MT), effective January 1, 1996. This became the U.S. consumption baseline for HCFCs.

The 1992 Copenhagen Amendment created a schedule of graduated reductions and provided for the eventual phaseout of HCFC consumption (Copenhagen, 23-25 November, 1992, Decision IV/4). Prior to a later adjustment in 2007, the schedule initially allowed a non-Article 5 country to consume 65 percent of its consumption cap in 2004, followed by 35 percent in 2010, 10 percent in 2015, 0.5 percent in 2020 for the servicing of existing refrigeration and air-conditioning equipment, and a total phaseout in 2030.

The Copenhagen Amendment did not cap HCFC production. In 1999, the Parties created a cap on production for non-Article 5 Parties through an amendment to the Montreal Protocol agreed by the Eleventh Meeting of the Parties (Beijing, 29 November – 3 December, 1999, Decision XI/5). The cap on production was set at the average of: (a) 1989 HCFC production plus 2.8 percent of 1989 CFC production, and (b) 1989 HCFC consumption plus 2.8 percent of 1989 CFC consumption. Based on this formula, the U.S. HCFC production cap was 15,537 ODP-weighted MT, effective January 1, 2004. This became the U.S. production baseline for HCFCs.

To further protect human health and the environment, the Parties to the Montreal Protocol adjusted the Montreal Protocol’s phaseout schedule for HCFCs at the 19th Meeting of the Parties

³ Class I refers to the controlled substances listed in appendix A to 40 CFR part 82 subpart A. Class II refers to the controlled substances listed in appendix B to 40 CFR part 82 subpart A.

in September 2007. In accordance with Article 2(9)(d) of the Montreal Protocol, the adjustment to the phaseout schedule was effective on May 14, 2008.⁴

As a result of the 2007 Montreal Adjustment (reflected in Decision XIX/6), the U.S. and other non-Article 5 countries may only consume 25 percent of their HCFC baseline beginning in 2010, rather than 35 percent. Other milestones remain the same. The adjustment also resulted in a phaseout schedule for HCFC production that parallels the consumption phaseout schedule. All production and consumption for non-Article 5 Parties is phased out by 2030.

Decision XIX/6 also adjusted the provisions for Parties operating under paragraph 1 of Article 5 (developing countries): (1) to set HCFC production and consumption baselines based on the average of 2009-2010 production and consumption, respectively; (2) to freeze HCFC production and consumption at those baselines in 2013; and (3) to add stepwise reductions to 90 percent of baseline by 2015, 65 percent by 2020, 32.5 percent by 2025, and 2.5 percent by 2030 – allowing, between 2030 and 2040, an annual average of no more than 2.5 percent to be produced or imported solely for servicing existing air-conditioning and refrigeration equipment. All production and consumption for Article 5 Parties will be phased out by 2040. Decision XIX/6, included in the *Report of the Nineteenth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer*, is available in the docket for this rulemaking.

In addition, in the Montreal Adjustments, Parties agreed to adjust Article 2F to allow non-Article 5 countries to produce “up to 10 percent of baseline levels” for export to Article 5 countries “in order to satisfy basic domestic needs” until 2020. Paragraph 14 of Decision XIX/6 notes that by no later than 2015, the Parties would consider “further reduction of production for basic domestic needs” in 2020 and beyond. Under paragraph 13 of Decision XIX/6, the Parties will review in 2015 and 2025, respectively, the need for the “servicing tails” for non-Article 5

⁴ Under Article 2(9)(d) of the Montreal Protocol, an adjustment enters into force six months from the date the depositary (the Ozone Secretariat) circulates it to the Parties. The depositary accepts all notifications and documents related to the Protocol and examines whether all formal requirements are met. In accordance with the procedure in Article 2(9)(d), the depositary communicated the adjustment to all Parties on November 14, 2007. The adjustment entered into force and became binding for all Parties on May 14, 2008.

and Article 5 countries. The term “servicing tail” refers to an amount of HCFCs needed to service existing equipment, such as certain types of air-conditioning and refrigeration appliances.

B. How Does the Clean Air Act Phase Out HCFCs?

The U.S. has chosen to implement the Montreal Protocol phaseout schedule on a chemical-by-chemical basis. In 1992, environmental and industry groups petitioned EPA to implement the required phaseout by eliminating the most ozone-depleting HCFCs first. Based on the available data at that time, EPA believed the U.S. could meet, and possibly exceed, the required Montreal Protocol reductions through a chemical-by-chemical phaseout that employed a “worst-first” approach, which focuses on phasing out certain chemicals with higher ODP earlier than others. In 1993, as authorized by section 606 of the CAA, the U.S. established a phaseout schedule that eliminated HCFC-141b first and would greatly restrict HCFC-142b and HCFC-22 next, followed by restrictions on all other HCFCs and ultimately a complete phaseout (58 FR 15014, March 18, 1993; 58 FR 65018, December 10, 1993).

On January 21, 2003, EPA promulgated regulations (“2003 Final Rule,” 68 FR 2820) to ensure compliance with the first reduction milestone in the HCFC phaseout: the requirement that by January 1, 2004, the U.S. reduce HCFC consumption by 35 percent and freeze HCFC production. In the 2003 Final Rule, EPA established chemical-specific consumption and production baselines for HCFC-141b, HCFC-22, and HCFC-142b for the initial regulatory period ending December 31, 2009. Section 601(2) states that EPA may select “a representative calendar year” to serve as the company baseline for HCFCs. In the 2003 Final Rule, EPA concluded that because the entities eligible for allowances had differing production and import histories, no single year was representative for all companies. Therefore, EPA assigned an individual consumption baseline year to each company by selecting its highest ODP-weighted consumption year from among the years 1994 through 1997. EPA assigned individual production baseline years in the same manner. EPA also provided for new entrants that began importing

after the end of 1997 but before April 5, 1999, the date the advanced notice of proposed rulemaking was published. EPA took this action to ensure that small businesses that might not have been aware of the impending rulemaking would be able to continue in the HCFC market.

The 2003 Final Rule apportioned production and consumption baselines to each company in amounts equal to the company's highest "production year" or "consumption year," as described above. It completely phased out the production and import of HCFC-141b by granting zero percent of that substance's baseline for production and consumption in the table at 40 CFR 82.16. EPA did, however, create a petition process to allow applicants to request small amounts of HCFC-141b until 2015. The 2003 Final Rule also granted 100 percent of the baselines for production and consumption of HCFC-22 and HCFC-142b for each of the years 2003 through 2009. EPA was able to allocate allowances for HCFC-22 and HCFC-142b at 100 percent of baseline because, in light of the concurrent complete phaseout of HCFC-141b, the allocations for HCFC-22 and HCFC-142b, combined with projections for consumption of all other HCFCs, remained below the 2004 cap of 65 percent of the U.S. baseline.

EPA allocates allowances for specific years; they are valid between January 1 and December 31 of a given control period (i.e., calendar year). Prior to December 15, 2009, EPA had not allocated any HCFC allowances for 2010 or beyond. The regulations at section 82.15(a) and (b) only addressed the production and import of HCFC-22 and HCFC-142b for the years 2003-2009. Absent the granting of calendar-year allowances, section 82.15 would have prohibited the production and import of HCFC-22 and HCFC-142b after December 31, 2009. The 2009 Final Rule allowed for continued production and consumption, at specified amounts, of HCFC-142b, HCFC-22, and other HCFCs not previously included in the allowance system, for the 2010-2014 control periods.

In the U.S., an allowance is the unit of measure that controls production and consumption of ODS. EPA establishes company-by-company baselines (also known as "baseline allowances")

and allocates calendar-year allowances equal to a percentage of the baseline for specified control periods. A calendar-year allowance represents the privilege granted to a company to produce or import one kilogram (not ODP-weighted) of the specific substance. EPA allocates two types of calendar-year allowances – production allowances and consumption allowances. “Production allowance” and “consumption allowance” are defined at section 82.3. To produce an HCFC for which allowances have been allocated, an allowance holder must expend both production and consumption allowances. To import an HCFC for which allowances have been allocated, an allowance holder must expend consumption allowances. An allowance holder exporting HCFCs for which it has expended consumption allowances may request a refund of those consumption allowances by submitting proper documentation and receiving approval from EPA.

Since EPA is implementing the phaseout on a chemical-by-chemical basis, it allocates and tracks production and consumption allowances on an absolute kilogram basis for each chemical. Upon EPA approval, an allowance holder may transfer calendar-year allowances of one type of HCFC for calendar-year allowances of another type of HCFC, with transactions weighted according to the ODP of the chemicals involved. Pursuant to section 607 of the CAA, EPA applies an offset to each HCFC transfer by deducting 0.1 percent from the transferor’s allowance balance. The offset benefits the ozone layer since it “results in greater total reductions in the production in each year of . . . class II substances than would occur in that year in the absence of such transactions” (42 U.S.C. 7671f).

The U.S. remained comfortably below the aggregate HCFC cap through 2009. The 2003 Final Rule announced that EPA would allocate allowances for 2010-2014 in a subsequent action and that those allowances would be lower in aggregate than for 2003-2009, consistent with the next stepwise reduction for HCFCs under the Montreal Protocol. EPA stated its intention to determine the number of allowances that would be needed for HCFC-22 and HCFC-142b, bearing in mind that other HCFCs would also contribute to total HCFC consumption. EPA noted

that it would likely achieve the 2010 stepwise reduction by applying a percentage reduction to the HCFC-22 and HCFC-142b baselines. EPA subsequently reviewed market conditions to estimate servicing needs and market adjustments in the use of HCFCs, including HCFCs for which EPA did not establish baselines in the 2003 Final Rule.

In the 2009 Final Rule, EPA estimated the need for HCFC-22 during the 2010-2014 regulatory period, and determined the percentage of that need for which it was appropriate to allocate allowances. As described in section IV.B.3. of the proposed rule (77 FR 237), EPA determined that the percentage of the estimated need allocated in the form of allowances should not remain constant from year to year but rather should decline on an annual basis. For 2010, EPA allocated allowances equal to 80 percent of the estimated need for HCFC-22, concluding that reused, recycled, and reclaimed material could meet the remaining 20 percent. Under the 2009 Final Rule, the percentage of estimated need for which there was no allocation, and therefore would need to be met through recycling and reclamation, rose from 20 percent in 2010 to 29 percent in 2014 to ensure the U.S. market would have a viable reclamation industry and could meet the 2015 stepwise reduction under the Montreal Protocol.

As explained in the Background section, EPA is undertaking this rulemaking as a result of the decision issued by the Court in *Arkema* (618 F.3d 1, D.C. Cir. 2010), in which the Court vacated portions of the 2009 Final Rule.

C. What Sections of the Clean Air Act Apply to This Rulemaking?

Several sections of the CAA apply to this rulemaking. Section 605 of the CAA phases out production and consumption and restricts the use of HCFCs in accordance with the schedule set forth in that section. As discussed in the 2009 Final Rule (74 FR 66416), section 606 provides EPA authority to set a more stringent phaseout schedule than the schedule in section 605 based on an EPA determination regarding current scientific information or the availability of substitutes, or to conform to any acceleration under the Montreal Protocol. EPA previously set a

more stringent schedule than the section 605 schedule through a rule published December 10, 1993 (58 FR 65018). Through the 2009 Final Rule, EPA accelerated the section 605 schedule to reflect the acceleration under the Montreal Protocol as agreed to under the Montreal Protocol in September 2007. The more stringent schedule established in that rule is unaffected by the 2010 Court decision and is therefore still in effect.

Section 606 provides EPA authority to promulgate regulations that establish a schedule for production and consumption that is more stringent than what is set forth in section 605 if: “(1) based on an assessment of credible current scientific information (including any assessment under the Montreal Protocol) regarding harmful effects on the stratospheric ozone layer associated with a class I or class II substance, the Administrator determines that such more stringent schedule may be necessary to protect human health and the environment against such effects, (2) based on the availability of substitutes for listed substances, the Administrator determines that such more stringent schedule is practicable, taking into account technological achievability, safety, and other relevant factors, or (3) the Montreal Protocol is modified to include a schedule to control or reduce production, consumption, or use of any substance more rapidly than the applicable schedule under this title.” It is only necessary to meet one of the three criteria. In the 2009 Final Rule, EPA determined that all three criteria had been met with respect to the schedule for phasing out production and consumption of HCFC-22 and HCFC-142b.

As noted in the 2009 Final Rule, while section 606 is sufficient authority for establishing a more stringent schedule than the section 605 phaseout schedule, section 614(b) of the CAA provides that in the case of a conflict between the CAA and the Montreal Protocol, the more stringent provision shall govern. Thus, section 614(b) requires the agency to establish phaseout schedules at least as stringent as the schedules contained in the Montreal Protocol. To meet the 2010 stepdown requirement, EPA is continuing to allocate HCFC allowances at a level that will

ensure the aggregate HCFC production and consumption will not exceed 25 percent of the U.S. baselines. For more discussion of this point, see 74 FR 66416.

Finally, section 607 addresses transfers of allowances both between companies and chemicals. EPA is further clarifying the policy and procedures applicable to inter-pollutant transfers in this action, and is making a minor change to the regulations governing inter-pollutant transfers to provide additional clarity to stakeholders.

D. How Does This Action Relate to the 2010 Court Decision?

Certain allowance holders affected by the 2009 Final Rule filed petitions for review in the U.S. Court of Appeals for the District of Columbia Circuit. Among other arguments, the petitioners, Arkema, Inc., Solvay Fluorides, LLC, and Solvay Solexis, Inc., contended that the rule was impermissibly retroactive because in setting the baselines for the new regulatory period, EPA did not take into account certain inter-pollutant baseline transfers that petitioners had performed during the prior regulatory period. The 2011 Interim Final Rule contained a description of those transfers and the EPA approvals of those transfers. As explained in the 2011 Interim Final Rule, Solvay Solexis, Inc. submitted two Class II Controlled Substance Transfer Forms for consumption allowance transfers to Solvay Fluorides, LLC on February 15, 2008, and March 4, 2008. Arkema, Inc. submitted two Class II Controlled Substance Transfer Forms for consumption and production allowance transfers on April 18, 2008. Each company requested EPA's approval to convert HCFC-142b allowances to HCFC-22 allowances, and checked a box on the EPA transfer form indicating that "baseline" allowances would be transferred. EPA sent non-objection notices to Solvay Solexis, Inc. and Solvay Fluorides, LLC on February 21, 2008, and March 20, 2008, and to Arkema, Inc. in April 2008. The transfer requests and EPA's non-objection notices were attached to petitioners' court filings and are available in the docket for this action.

In the Notice of Proposed Rulemaking titled “Protection of Stratospheric Ozone: Adjustments to the Allowance System for Controlling HCFC Production, Import, and Export,” published in the Federal Register at 73 FR 78680 on December 23, 2008 (2008 Proposed Rule), EPA requested comments on establishing baselines for the 2010-2014 regulatory period “with or without” taking into account baseline inter-pollutant transfers made during the 2003-2009 regulatory period (73 FR 78687). The proposed regulatory text accounted for the inter-pollutant transfers discussed above. The increase in HCFC-22 baseline allowances for Arkema, Inc. and Solvay Fluorides, LLC presented in the 2008 Proposed Rule resulted in a larger amount of HCFC-22 baseline allowances overall and therefore a lower percentage of HCFC-22 baselines allocated across the board in each control period. Specifically, the proposed shift resulted in a 16 percent decrease in allocation share for all other HCFC-22 allowance holders, and increases for the petitioners: Arkema and Solvay.

In the 2009 Final Rule, after considering comments, EPA determined that allowing inter-pollutant transfers from one regulatory period to become a part of the baseline in the next regulatory period could undermine the agency’s chemical-by-chemical phaseout approach and encourage market manipulation. EPA also concluded that section 607 of the CAA was best read as limiting inter-pollutant transfers to those conducted on an annual basis. For these reasons, EPA did not take the 2008 inter-pollutant transfers into account in establishing the baselines for the 2009 Final Rule covering 2010-2014.

The Court issued a decision on August 27, 2010, agreeing with petitioners that “the [2009] Final Rule unacceptably alters transactions the EPA approved under the 2003 Rule” (*Arkema v. EPA*, 618 F.3d at 3). The Court vacated the rule in part, “insofar as it operates retroactively,” and remanded to EPA “for prompt resolution,” (618 F.3d at 10). The Court withheld the mandate for the decision pending the disposition of any petition for rehearing. On

November 12, 2010, EPA filed a petition for rehearing, which was denied on January 21, 2011. The mandate issued on February 4, 2011.

EPA presented its interpretation of the Court's decision with regard to baseline allowances and 2011-2014 calendar-year allowances in the 2011 Interim Final Rule (76 FR 47456). EPA has not changed that interpretation but is repeating it here for ease of reference. Because the Court vacated the rule only in part, and because various parts of the rule are intertwined, EPA relied on its expertise in administering the HCFC phaseout regulations under Title VI of the CAA to determine how to apply the vacatur within the confines of the balance of the rule, which was not vacated. First, EPA noted that the rule contains elements that were not at issue in the litigation. EPA concluded that the vacatur had no effect on allowances for any substances other than HCFC-142b and HCFC-22, since the petitioners' claims and the opinion itself discuss only those two substances. Similarly, EPA concluded that other discrete portions of the rule, such as the provisions on use and introduction into interstate commerce, were unaffected by the vacatur.

The baselines for HCFC-142b and HCFC-22 were clearly at issue in the litigation and indeed are the focus of the Court's opinion. The Court found that "the agency's refusal to account for the Petitioners' baseline transfers of inter-pollutant allowances in the Final Rule is impermissibly retroactive," (618 F.3d at 9). Because baseline and calendar-year allowances are inextricably linked,⁵ EPA determined that the Court's vacatur voided the HCFC-22 and HCFC-142b baselines in 40 CFR 82.17 and 82.19 as well as the percentage of baseline allocated for those specific substances in 40 CFR 82.16 for all companies listed in those sections.⁶ This meant that in the absence of this rule, production and import of these two substances were prohibited under 40 CFR 82.15. Recognizing this scenario, EPA sent letters in January 2012 and January

⁵ Baseline and calendar-year allocations are inextricable because calendar-year allocations are expressed as a percentage of baseline, and the percentage of baseline allocated for a specific substance varies depending on the sum of all company baselines for that substance. The process is described in greater detail in section IV.

⁶ The companies' allocations are inter-related because, as noted in footnote 5, the percentage of baseline allocated varies according to the sum of the company-specific baselines.

2013 to affected stakeholders informing them that the agency would exercise enforcement discretion for a limited period provided their production and import did not exceed specified levels and provided that they adhered to additional conditions.

In determining the meaning of the Court's vacatur, EPA considered whether this interpretation was consistent with what the Court intended and a good fit for the specific circumstances, which include the goals and design of the HCFC allowance program and the basic structure of the 2009 Final Rule. While this interpretation is appropriate in this instance, it is possible that another interpretation would be more appropriate in a case involving a program with different goals, design, or structure.

EPA's initial response to the Court's partial vacatur was to issue the 2011 Interim Final Rule (76 FR 47451). That rule allocated allowances for 2011 only. Through today's notice, EPA is addressing the Court's decision as it relates to the remainder of the regulatory period ending December 31, 2014.

IV. How Is EPA Allocating HCFC-22 and HCFC-142b Allowances for 2012-2014?

EPA is continuing the system established in previous rulemakings (68 FR 2820, 74 FR 66412, 76 FR 47451) for HCFC production and import in the U.S. The process works as follows for each HCFC: First, all the company-specific baselines listed in the tables at 40 CFR 82.17 and 82.19 are added to determine the aggregate amount of baseline production and consumption, respectively. Second, EPA determines how many consumption allowances the market needs for a given year, taking into account sources other than new production and import, and then divides that amount by the aggregate amount of baseline allowances. The resulting percentage is listed in the table at section 82.16 and becomes what each company is allowed to consume in a given control period. For example, a company with 100,000 kg of HCFC-22 baseline consumption allowances would multiply that number by the percentage allowed for the year (for example, 17.7 percent in 2012) to determine its calendar-year consumption allowance is 17,700 kg.

In this rulemaking EPA is (1) establishing 2012-2014 company-by-company consumption and production baselines for HCFC-22 and HCFC-142b in the tables at 40 CFR 82.17 and 82.19 identical to the baselines established in the 2011 Interim Final Rule (76 FR 47468); (2) allocating company-by-company production and consumption allowances for these substances for 2012-2014 by establishing allowed percentages of production and consumption baselines in two tables at section 82.16; and (3) revising the regulatory text at 40 CFR 82.23 to make the procedure for all future inter-pollutant transfers clear. EPA will address the baselines and allocations for the control periods beyond 2014 at a later date. All aspects of the 2009 Final Rule promulgated on December 15, 2009, (74 FR 66412) that are not addressed in this final rule are unchanged.

EPA again notes that beginning January 1, 2015, section 605 of the CAA prohibits the use and introduction into interstate commerce of any HCFC listed as a class II substance unless it “(1) has been used, recovered and recycled; (2) is used and entirely consumed (except for trace quantities) in the production of other chemicals; (3) is used as a refrigerant in appliances manufactured prior to January 1, 2020; or (4) is listed as acceptable for use as a fire suppression agent for nonresidential applications in accordance with section 612(c).” In addition, EPA’s regulations at 40 CFR 82.15 restricted use and introduction into interstate commerce of HCFC-141b, HCFC-142b, and HCFC-22 beginning in 2010, with limited exceptions.

A. What Baselines Is EPA Using for HCFC-22 and HCFC-142b Allowances?

In the January 4, 2012, notice, EPA proposed to establish 2012-2014 company-by-company consumption and production baselines for HCFC-22 and HCFC-142b that were identical to the baselines established in the 2011 Interim Final Rule (see 40 CFR 82.17 and 82.19). EPA also provided advance notice that it would consider updating baselines for the 2015-2019 regulatory period, especially if there is an environmental benefit to doing so.

1. What Baselines Is EPA Using for 2012-2014?

Four companies commented on how EPA should proceed with establishing baselines for 2012-2014. Arkema and Solvay both support EPA's inclusion of past inter-pollutant transfers of baseline allowances, and believe that the proposed baselines are fully consistent with the *Arkema* decision. On the other hand, DuPont and Honeywell state that *Arkema* does not require EPA to recognize the inter-pollutant baseline transfers beyond 2009, nor does it address the validity of the 2008 transfers. These commenters also state that recognizing these transfers beyond 2009 is contrary to section 607, EPA's transfer regulations, and the agency's interpretation of those regulations for chemicals that are being phased down. In addition, they assert that if EPA does take those transfers into account in establishing baselines for 2012-2014, the agency should only allocate the percentage of the transferred baselines that would be allocated if the baselines had never been converted from HCFC-142b to HCFC-22. They state that recognizing the transfers has the effect of increasing the baseline share of the petitioners in *Arkema* and reducing the share of other companies in violation of their due process rights. Finally, they state that under the *Arkema* decision, their share of the baseline is vested.

EPA cited several reasons why it would prefer to set baselines without taking into account inter-pollutant transfers in the 2009 Final Rule (74 FR 66420), in the Response to Comments document included in the record for that rulemaking and in the 2011 Interim Final Rule (76 FR 47451). These considerations remain important, and are the basis for EPA's policy on future inter-pollutant transfers, which is discussed in section V of this notice. However, EPA must act in accordance with the Court's holding regarding the 2008 transfers. In *Arkema*, the Court concluded that EPA's non-objection notices for the 2008 transfers created "vested rights" in the transferred baselines, which EPA must reflect in rules governing the current regulatory period, at least to the extent such rules continue to use the historical production and consumption baselines. The Court explicitly held that "the Agency's refusal to account for the Petitioners' baseline transfers of interpollutant allowances in the Final Rule is impermissibly retroactive,"

(*Arkema*, 618 F.3d at 24). Given the *Arkema* decision, and given the recent decision in *Honeywell International, Inc. v. EPA*, D.C. Cir. No. 10-1347 (January 22, 2013) (“*Honeywell*”), EPA is recognizing the 2008 transfers in establishing the baselines through 2014. Thus, the baselines finalized for 2012-2014 in today’s rule are identical to the HCFC-22 and HCFC-142b baselines established in the 2011 Interim Final Rule.

The commenters assert that the *Arkema* decision did not determine the validity of the transfers. They further assert that EPA lacked authority to approve permanent inter-pollutant baseline transfers, that the 2008 transfers as characterized by the Court are thus invalid, and that EPA should not recognize them in setting baselines. The validity of the 2008 transfer approvals was challenged in *Honeywell*. The brief filed by the agency on January 30, 2012, provides further response to several of the arguments that Honeywell and DuPont make in their comments on the proposed rule and is included in the docket for this rulemaking.

The commenters do not assert that EPA lacked authority to approve inter-pollutant transfers whose effects were limited to the regulatory period ending in 2009. Rather, they assert that EPA lacked authority to approve inter-pollutant transfers with effects lasting beyond 2009. They state that *Arkema* did not determine the validity of such transfers. Yet the *Arkema* Court found contrary to the Agency’s position, that EPA had “approved permanent changes to the baseline as a result of inter-pollutant transfers” and that the Agency could not “undo these completed transactions,” (*Arkema*, 618 F.3d at 23). It is not plausible that the Court would have reached this holding if it viewed EPA’s authority to approve inter-pollutant transfers with effects beyond the immediate regulatory period as open to debate. As the Court stated in *Honeywell*, “the *Arkema* Court necessarily concluded that permanent inter-pollutant transfers were permissible under the statute” (slip op. at 7). The *Honeywell* Court noted that it was bound by *Arkema* and denied commenters’ petition for review of the 2008 transfers. The *Honeywell* decision is available in the docket for this action.

Contrary to the commenters' assertions, section 607 of the CAA is ambiguous with regard to whether inter-pollutant transfers may have permanent effects that carry forward to subsequent regulatory periods. EPA has discretion under section 607 to determine how to treat such transfers. While EPA did not intend its non-objection notices to confer permanence to the 2008 inter-pollutant transfers, EPA disagrees with commenters' implication that under section 607, the agency *could not have* done so. That would be true only if section 607 expressly prohibited permanent inter-pollutant transfers, which it does not. As discussed in more detail in section V.A. of this preamble, for policy reasons EPA will approve only *annual* inter-pollutant transfers in the future. EPA also believes that while section 607 is not clear on its face, it is best interpreted as precluding permanent inter-pollutant transfers, as explained in section V.A. of this preamble. As noted by the Court in *Arkema*, interpreting section 607 to preclude permanent inter-pollutant transfers "may more accurately track the statutory mandate," (*Arkema*, 618 F.3d at 22).

Commenters assert that EPA has departed from its own regulations in proposing to recognize the 2008 inter-pollutant transfers in the baselines for 2012-2014. Commenters ignore, however, the Court's interpretation of those regulations. EPA's intent in the 2003 Rule, which established the transfer provisions, was to preclude permanent inter-pollutant transfers of baseline allowances (see 68 FR 2835). EPA notes that until the rulemaking that resulted in the 2009 Final Rule, the agency did not specifically develop a policy on whether inter-pollutant transfers could ever carry forward to a new regulatory period following one of the intermediate phasedown steps. Nonetheless, the *Arkema* decision found that the agency's conclusion in the 2009 Final Rule not to carry inter-pollutant transfers forward to a new regulatory period "departed from the policy it had adopted in the 2003 Rule," (*Arkema*, 618 F.3d at 6). EPA cannot disregard the Court's holding on the ground that the 2003 Rule prohibited permanent inter-pollutant transfers where the Court has found otherwise.

The commenters are also incorrect that EPA previously interpreted its regulations as creating a “phasedown follows the allowance” principle. Commenters assert that under this principle, EPA should only allocate the percentage of the transferred baselines allocated for HCFC-142b. However, EPA has never adopted such a principle. Preamble statements leading up to and accompanying the 2003 Rule refer to the elimination of HCFC-141b baseline upon the chemical’s complete phaseout, “regardless of what inter-pollutant transfers had taken place,” (68 FR 2835). That is a different matter from a partial phasedown, like the phasedown of HCFC-22 and HCFC-142b in 2010. Additionally, the commenters’ approach runs counter to the way EPA allocates allowances as described in section IV of this preamble.

Finally, the commenters assert that EPA has violated their due process rights by decreasing their market share, which they argue is a vested right under *Arkema*. From a substantive perspective, what they assert is a vested right (i.e., a specific share of allowances) is not in fact a vested right, nor is it protected under the due process clause. The Court held that EPA’s actions in approving the 2008 transfers created vested rights in the transferred baselines. The Court placed particular emphasis on the fact that the Agency took affirmative actions that appeared to ratify the transfers: “The Agency’s approval and acknowledgement of Petitioners’ actions distinguishes this case from situations where a company’s unilateral business expectations are thwarted by a change in the regulatory framework,” (*Arkema*, 618 F.3d at 20). The Court did not examine the issue of whether companies possessed vested rights in baseline or calendar-year allowances generally, or in a specific share of allowances. Nor did the Court hold that the transferred baselines, baseline allowances generally, or calendar-year allowances, are property rights protected under the Due Process Clause. Furthermore, it did not state that companies had any right to a specific number of production or consumption allowances. On the contrary, the Court noted that “the 2010 stepdown gave the EPA occasion to adjust its distribution of allowances,” (*Arkema*, 618 F.3d at 25).

EPA's regulatory definitions specify that production and consumption allowances are privileges, not rights (*see* 40 CFR 82.3). As discussed in Section II, the U.S. is in the process of phasing out production and consumption of HCFCs, culminating in a complete phaseout in 2030. EPA's regulations prohibit production and consumption of HCFCs without allowances (40 CFR 82.16(a), (b)). In the absence of this final rule, no allowances would exist for 2012 or beyond. In this regulatory environment, no company has an entitlement to a specific number or share of HCFC allowances.

In addition, under this final rule, commenters are receiving the same number of baseline allowances they received under previous HCFC allocation rules. Recognition of the 2008 transfers in the aggregate HCFC-22 consumption baseline does not require EPA to extract baseline allowances from other companies.

From a procedural perspective, commenters were given multiple opportunities to comment on or challenge the effects of the 2008 transfers at issue in *Arkema* on baselines for the current regulatory period. As noted in *Honeywell*, they had "notice and an opportunity to present [their] views during EPA's pre-*Arkema* regulatory proceedings, during the *Arkema* litigation, and during EPA's subsequent post-*Arkema* proceedings" (slip op. at 7). They commented on the 2009 Final Rule, the 2011 Interim Final Rule and the proposal for this final rule. They also had the opportunity to intervene in the *Arkema* lawsuit and the opportunity to challenge the 2011 Interim Final Rule, in which EPA actually reflected the 2008 transfers in establishing baselines. A more detailed summary of the comments on this issue, as well as the Agency's response to issues not addressed in the preamble or the briefs, is included in the Response to Comments, found in the docket for this rulemaking.

2. What Baselines Is EPA Considering for 2015-2019?

Looking ahead to the next regulatory period, the agency received four comments on whether it should use more recent production and import data in establishing baselines for 2015-

2019. Two commenters recommend using data from 2005-2007 because these years were used to establish baselines in the 2009 Final Rule for newly-controlled HCFCs (74 FR 66412). In addition, using the highest production and import levels from 2005-2007 would reflect current and stable market conditions. One commenter points out that production and consumption in 2008 and 2009 were likely affected by the economic downturn, while 2010 and 2011 fall under the stepdown established by the 2009 Final Rule. Another commenter believes that updating baselines would avoid rewarding companies for attempting to manipulate their baselines by converting allowances from HCFCs with lower future market value (i.e., HCFC-142b) to HCFC allowances they knew would retain value in the next regulatory period (i.e., HCFC-22).

Two other commenters do not support revised baselines. One of the commenters believes that the current allocation method is the fairest method because it is transparent and well understood by all market participants. The other commenter sees no benefit to updating baselines, but says future reductions in allocations will benefit the environment by promoting reclamation.

Since EPA did not propose to establish baselines for 2015-2019, the agency will continue to assess the merits of using a more recent set of years to establish baselines in a later rulemaking. The agency is still receptive to the idea of updating baselines in 2015, but notes that it did not receive any evidence that there is an environmental benefit to doing so.

B. What Factors Did EPA Consider in Determining Allocation Amounts for HCFC-22 and HCFC-142b?

In the 2009 Final Rule, EPA decided to allocate HCFC-22 and HCFC-142b allowances based on the projected servicing needs for those substances, taking into account the portion of need that can be met through recycling and reclamation. EPA is not changing that general approach, and continues to believe it is necessary in order to promote the use of used, recycled, and reclaimed material in anticipation of the 2015 phasedown step. In accordance with the

Court's decision in *Arkema*, the agency proposed, and is now finalizing, baselines that reflect 2008 inter-pollutant baseline transfers. This approach necessitates issuing a different percentage of company baselines in order for the aggregate number of calendar-year HCFC-22 consumption allowances to be less than or equal to the 2009 Final Rule. In fact, EPA proposed to allocate significantly fewer consumption allowances for HCFC-22 relative to the 2009 Final Rule based on an analysis of updated market conditions.

Specifically, the agency considered to what extent servicing need can be met by (1) significant inventories of existing HCFC-22, (2) increased reclamation capacity, and (3) re-use of HCFC-22 within supermarkets. See "Analysis of HCFC-22 Servicing Needs in the U.S. Air Conditioning and Refrigeration Sector: Additional Considerations for Estimating Virgin Demand" (Adjustment Memo), included in the docket to this rulemaking. In the Adjustment Memo, EPA considers a higher and a lower HCFC-22 allocation scenario for each year. In the larger allocation scenario: (1) surplus inventory from past years (hereinafter called "existing inventory") meets 6,000 MT of estimated need each year; (2) recovery and reclamation meet 12,500 MT of need, the same amount as in the 2009 Final Rule; and (3) 20 percent of total need in the large retail food sector is met by in-house recovery and reuse. In the smaller allocation scenario: (1) existing inventory also meets 6,000 MT of estimated need each year; (2) recovery and reclamation meet 19,700 MT of estimated servicing need; and (3) 70 percent of total need in the large retail food sector is met by in-house recovery and reuse.

As shown in Table 4 of the Adjustment Memo, the agency proposed to issue HCFC-22 consumption allowances as follows: (1) between 25,100 and 36,200 MT in 2012 (a decrease of 11 to 38 percent relative to the 2009 Final Rule); (2) between 20,800 and 31,400 MT in 2013 (a decrease of 13 to 42 percent); and (3) between 16,400 and 26,300 MT in 2014 (a decrease of 15 to 47 percent). These proposed amounts correspond to allocations of 17.7 to 25.5 percent of baseline in 2012, 14.7 to 22.1 percent in 2013, and 11.6 to 18.5 percent in 2014. The agency took

comment on its analysis of market conditions, which specifically looked at existing inventory, reclamation capacity, and HCFC-22 reuse in the supermarket industry. EPA also asked for comment on potential difficulties faced by small businesses and on whether or not the installation of dry-shipped HCFC-22 condensing units affects the phaseout.

Between the 2011 Interim Final Rule and the proposed rule, the agency received a total of 50 comments (some with multiple signatories) on the market conditions (see section 2 of the Response to Comments) considered in allocating HCFC-22 and HCFC-142b allowances. As discussed in the proposed rule, the need for HCFC-22 to service existing equipment is the primary factor affecting EPA's overall allocation of production and consumption allowances for the current regulatory period. Thus, the Adjustment Memo only discusses HCFC-22 and most comments, as well as the agency's response, focus primarily on HCFC-22.

Additionally, EPA received 13 comments, four from the Interim Final Rule and nine from the proposed rule, on whether or not to provide more HCFC-22 and/or HCFC-142b consumption and/or production allowances as compensation for lost opportunities during 2010 ("recoupment"). Lastly, the agency proposed to allocate different annual percentages of baseline for consumption than for production ("decoupling"). Without decoupling the baselines, the percentage of baseline allocated for production would be the same as that for consumption for a given HCFC. Nine comments specifically addressed decoupling of baseline percentages.

1. How Is EPA Adjusting Estimated Servicing Need to Account for Surplus Inventory from Past Years?

The agency proposed to account for existing inventory of HCFC-22 produced in previous years by making downward adjustments to the consumption allocation of 6,000 MT each year. EPA's analysis indicated the amount of existing inventory was between 22,700 MT and 45,400 MT. Including relevant comments received on the 2011 Interim Final Rule, EPA received eight comments on its assessment of existing inventory of HCFC-22. Seven comments state there are

significant volumes of HCFC-22 in existing inventory and that accounting for this inventory is essential for supporting recovery and reclamation. One of those commenters indicates the 6,000 MT proposed annual adjustment and the 45,400 MT stockpile estimate should be considered a minimum, not maximum amount. Another also supports EPA's consideration of existing inventory, and believes the estimates used in the proposed rule may be too low based on their own inventory and their own estimates of industry-wide inventory.

All comments on EPA's analysis, including confidential comments, indicate EPA's estimate of existing inventory is reasonable and that an annual adjustment to the estimated servicing need of 6,000 MT is supportable. EPA considered a wide range of existing inventory (between 22,700 MT and 45,500 MT), but comments support the proposed 6,000 MT adjustment regardless of the total stock of existing inventory. Based on the information provided, the agency does not believe the annual adjustment or the estimate of existing inventory should be increased. Overestimating the amount in inventory could limit the ability of consumers to service their equipment, resulting in systems being prematurely decommissioned. EPA provides a full summary of comments and agency responses in the Response to Comments, but notes here that all commenters who addressed the proposed 6,000 MT adjustment specifically were in support of an adjustment at least that large. EPA is finalizing the consumption allocation with the proposed adjustment for existing inventory.

2. How Is EPA Adjusting Allowances to Encourage Recovery, Reclamation and Reuse?

In the 2009 Final Rule, the agency recognized that servicing needs can be met with a combination of newly-manufactured or imported HCFCs (virgin HCFCs) and HCFCs that have been recovered and either reused, recycled, or reclaimed. The *2009 Servicing Tail Report* analyzed various reclamation scenarios, and after several rounds of industry feedback, the agency decided to issue allowances 12,500 MT below estimated need in 2010-2014. For 2010, 12,500 MT was 20 percent of the estimated need. EPA continues to believe that reused, recycled,

and reclaimed material can help meet HCFC-22 servicing needs. The agency published new projections of reclaim capabilities in the Adjustment Memo, and took comment on those projections via this rulemaking.

Out of the 15 comments EPA received on reclaim capabilities, 14 comments (some signed by multiple organizations) supported EPA's analysis that the reclamation industry has the capacity to reclaim more than 19,700 MT per year. One comment stated that the infrastructure to effectively and efficiently recover, recycle, redistribute, and reuse HCFC-22 likely will take several years to develop. In addition, one company agreed that the industry has the capacity to meet reclaim needs, but disagreed with the base assumption that this activity will automatically take place.

In the Adjustment Memo, EPA considered annual reclamation levels of 12,500 MT and 19,700 MT. Several organizations state that the 19,700 MT figure should be a minimum, rather than a maximum, because established companies that reclaim refrigerants have the technical capacity to recover 19,700 MT or more in 2012 alone and could easily expand capacity to meet additional need. One company comments that reclamation companies will be able to expand to cover the need that will ultimately be driven by higher prices and a decrease in supply. However, companies will not expand until there is a need. Another company also states that it could easily triple its current capacity, and believes the same is true for many reclamation companies. Many companies support an allowance reduction to encourage an increase in reclamation capacity and volume. These commenters, including 20 EPA-certified reclaimers that submitted a single comment, all believe that the capacity exists to handle increased reclamation volumes.

Several commenters believe sufficient recovery and reclamation capacity exists, but that the supply chain of used refrigerant from equipment-in-use to reclamation facilities is fragmented and complex. The concern is not whether capacity exists, or whether reclaimers could quickly expand capacity, but whether material is actually being recovered and brought to

reclaimers. A group of recovery companies believes that existing reclaimers have the capacity to process more than enough HCFC-22 to meet the industry needs, but are not convinced that given the present situation, there will be enough refrigerant recovered to meet the raw material needs of the reclaimers. However, a group of recovery companies that focuses exclusively in recovering used refrigerant from retiring equipment does believe reducing allowances will change the incentives for recovery. Finally, one company believes that EPA's estimate of the potential for recovery and reuse is too optimistic during 2012-2014, particularly because residential air conditioners use only small quantities of the gas.

EPA's assessment that the reclamation industry has the capacity to reclaim 19,700 MT of HCFC-22 per year, as presented in the Adjustment Memo, is supported by most of the comments received. The amount of used refrigerant that can be recovered from retiring equipment is sufficient to allow for the reclamation of 19,700 MT per year, based on expected recovery rates used in the Vintaging Model⁷. Included in the docket for this rulemaking is a new supporting memo titled "Recovered HCFC-22 Available to Meet Servicing Needs" (Recovery Memo). In this memo EPA shows the amount of HCFC-22 that can be recovered from HCFC-22 equipment that reaches its end of life under two scenarios. In the first scenario, EPA uses the end-of-life assumptions in the Vintaging Model to determine how much HCFC-22 is recovered from retiring equipment. The Vintaging Model uses a 35 percent recovery rate in retiring residential air conditioning systems. The Recovery Memo details all the recovery assumptions used, which are

⁷ The Vintaging Model is the primary tool that EPA uses to estimate projected HCFC consumption. The Vintaging Model estimates the annual chemical emissions from industry sectors that have historically used ODS, including air conditioning, refrigeration, foams, solvents, aerosols, and fire protection. Within these industry sectors, there are over fifty independently-modeled end uses. The model uses information on the market size and growth for each of the end uses, as well as a history and projections of the market transition from ODS to alternatives. As ODS are phased out, a percentage of the market share originally filled by the ODS is allocated to each of its substitutes. The model tracks emissions of annual "vintages" of new equipment that enter into operation by incorporating information on estimates of the quantity of equipment or products sold, serviced, and retired or converted each year, and the quantity of the compound required to manufacture, charge, and/or maintain the equipment. EPA's Vintaging Model uses this market information to build an annual inventory of in-use stocks of equipment and the ODS refrigerant and non-ODS substitutes in each of the end uses. This information is used to project the servicing needs of ODS-containing equipment. Additional information on the Vintaging Model is available in the *2009 Servicing Tail Report*, which can be found in the docket for this rulemaking.

nearly identical to those used in the *2009 Servicing Tail Report*. These numbers are similar to those presented in table 4-5, “Scenario 50: 50% Recovery Rate,” which was also presented in the *2009 Servicing Tail Report*. In the second scenario, EPA assumes all HCFC-22 is recovered at the end-of-life. The intent of this memo is to show that it is technically feasible to recover and reclaim 19,700 MT of HCFC-22 per year between 2012-2014, even when only 35 percent of the HCFC-22 is recovered from residential air conditioning systems—the largest use for HCFC-22.

However, EPA agrees with some commenters that the amount of refrigerant that is available to be recovered does not necessarily equal the amount that is recovered in practice, and that it will take time for recovery practices to change. The agency recognizes that assuming 19,700 MT of annual servicing need can be met by recovered and reclaimed material—instead of 12,500 MT—does not mean that amount will actually be reclaimed each year. EPA’s adjustment to encourage recovery and reclamation could also encourage transition to HCFC-22 alternatives and more recovery and reuse of HCFC-22 in systems that require a large refrigerant charge. Although both of these outcomes are difficult to measure and predict, EPA expects that these outcomes will sufficiently deal with any gap between the adjustment in allocation and realized reclamation levels. EPA adopted the same general approach in the 2009 Final Rule (using 12,500 MT instead of 19,700 MT) to foster recovery and reclamation. In addition, EPA has received anecdotal information from stakeholders that reclaimers are already offering increased incentives to return recovered refrigerant and that this will continue as long as there is an economic incentive to do so. As the supply of virgin refrigerant shrinks, the incentive to recover and reclaim used refrigerant will likely increase. EPA provides a full summary of comments and agency response in the Response to Comments.

EPA does not believe any of the concerns raised should preclude the agency from increasing the adjustment for reclamation from 12,500 MT to 19,700 MT to foster reclamation, especially in light of the 2015 Montreal Protocol cap and the 2020 phaseout of HCFC-22

production and import. EPA believes increased recovery and reclamation is necessary to ensure a smooth transition between now and 2020 and is increasing the difference (relative to the 2009 Final Rule) between estimated servicing need and the allocation for virgin production and import. The agency is finalizing the proposed 19,700 MT adjustment to foster increased HCFC-22 recovery and reclamation.

3. How Is EPA Accounting for Recovery and Reuse of HCFC-22 in the Supermarket Industry?

In the proposed rule, EPA considered adjusting the allocation for virgin HCFC-22 production and import to account for current recovery and reuse practices in the supermarket industry. Specifically, the agency estimated that between 20 percent and 70 percent of annual servicing need in the large retail food sector could be met by HCFC-22 recovered and reused in-house. In addition to the analysis conducted to develop the Adjustment Memo, EPA considered late comments that addressed recovery and reuse of HCFC-22 in supermarkets. The comments, combined with EPA's findings presented in the Adjustment Memo, indicate that supermarkets deal with recovered refrigerant in a variety of ways. Some appear to meet 10-20 percent of their annual servicing need with material they recovered from internal existing prior uses. Others have the material reclaimed and do not reuse or bank any of the material. A third group meets 80 to 100 percent of their annual need with reused material.

EPA received an additional comment on reuse by large end users, but not specifically supermarkets. The commenter notes that large users retiring equipment can efficiently and effectively capture the majority of refrigerant from commercial refrigeration and air conditioning units. These users can recover refrigerant for future servicing of other equipment they own. These users do not require reclamation technology or equipment, and can recover and reuse significant volumes of refrigerant. Such recovery and reuse should continue to be considered as a source of HCFC-22 service refrigerant.

EPA agrees that large end users, including supermarkets and other large commercial applications, can be a source for recovered HCFC-22. However, the agency only received information on how six companies reuse refrigerant in-house, and their reuse percentages are very different. Since the agency does not have sufficient data on in-house reuse, EPA is not accounting for supermarket reuse as its own category. However, the agency's Vintaging Model has reasonable estimates for actual recoverable material for various sectors, and EPA is using those modeled recovery rates for supermarkets to help support overall recovery and reuse estimates in this rule (see the Recovery Memo for specifics on modeled recovery rates).

4. Did EPA Consider Providing Allowances to Small Businesses in This Final Action?

In response to the 2011 Interim Final Rule, one small business informed EPA that it could not acquire either HCFC allowances or the HCFCs it needs to manufacture its HCFC blend (see the letters from ICOR dated May 17, 2011 and September 6, 2011, available in the docket for this action). To remedy this situation, the commenter requested that EPA provide unused allowances to companies that purchased either HCFCs or HCFC consumption allowances in 2008 and 2009. In the proposed rule, EPA noted that the inability to acquire allowances and/or HCFCs themselves does not appear to be a widespread problem, as numerous companies have made a significant number of transfers over the last year alone, and no other company has commented that it cannot acquire HCFCs. However, EPA took comment on whether other companies were having difficulty acquiring HCFCs or HCFC allowances. In the proposed rule, the agency also provided some historical background on how EPA provided flexibility for small businesses when establishing the HCFC allocation system.

EPA received four comments on providing allowances to manufactures of HCFC blends, all of which were in opposition. Two companies point to the flexibility for companies without baselines to obtain HCFCs or HCFC allowances by purchasing them from others. Another

commenter notes that EPA provided for new entrants when it established the allocation system in 2003.

Since EPA did not receive any additional comments in support of providing HCFC allowances to manufacturers of HCFC blends, and because the agency has previously stated its belief that the current allocation system provides significant flexibility for new entrants (as documented in the revised Flexibility Memo), EPA is not providing allowances for new entrants at this time.

EPA also sought comment on the concept of providing HCFC-22 allowances to reclaimers, but expressed reservations. EPA received eight comments on this topic: four in opposition and four in support. Comments in opposition state that providing allowances to reclaimers could encourage blending of refrigerant, instead of reclaiming refrigerant. They also cite administrative hurdles in establishing allowances for reclaimers and their skepticism that reclaimers would actually use the allowances to reclaim more material. All three commenters state that the proposed reduction in allowed production and import will encourage recovery and reclamation (without providing allowances).

One comment in support encouraged EPA to provide allowances to reclaimers as a reward for reclamation activities. The commenter also stated that manufacturers create a difficult working environment for reclaimers, claiming, for example:

- The manufacturers exert pressure on wholesalers and contractors not to return their used refrigerants to a reclaimer, using their supply of virgin refrigerants as leverage.
- The manufacturers have asked cylinder manufacturers not to sell pre-labeled DOT 39 cylinders for their blends to reclaimers.
- The manufacturers or their agents will buy an account back by offering a higher price for the used refrigerants than justified.

The commenter argues that the desire of manufacturers to promote their own best self-interest results in a difficult environment for a refrigerant reclaimer to prosper.

EPA continues to have serious concerns about providing allowances to reclaimers that did not historically produce or import HCFC-22 and have not already acquired HCFC-22 allowances. As stated in the proposed rule, the agency's primary concern is that providing allowances for reclaimers could foster unsustainable reclamation practices that rely on blending, instead of investment in the technology to fully reclaim HCFCs. Reclamation through separation and distillation will be more important in 2015 when the HCFC-22 allocation must drop by at least 45 percent from 2010 levels, and it will be absolutely necessary by 2020, at which time production and import of HCFC-22 must be phased out entirely. In addition, many businesses have either found a way to secure reliable access to virgin HCFCs or have made investments to reclaim HCFCs in a sustainable way, without a direct allocation of allowances.

EPA continues to believe that allocating fewer allowances—rather than providing allowances to reclaimers—is the best way to foster reclamation and recovery. In this final rule, EPA is taking significant steps to encourage recovery and reclamation by providing fewer HCFC-22 consumption allowances. Fewer allowances for new production and import increases the value of existing HCFCs, which in turn increases the incentives for recovery and reclamation. While the agency appreciates the concerns raised by reclaimers about the difficulties they encounter in the refrigerant reclamation business, these barriers have not stopped companies from becoming EPA-certified reclaimers—currently there are more than 50. Given the considerations above, the agency is not providing allowances to reclaimers at this time.

5. Does the Installation of Dry-shipped HCFC-22 Equipment Affect the Phaseout of HCFC-22?

In the proposed rule, EPA took comment on whether allowing repairs using HCFC-22 dry-shipped condensing units affects the phaseout of HCFC-22. Eight commenters believe the

repairs of existing equipment that involve installation of dry-shipped HCFC-22 condensing units is affecting the phaseout and/or should be stopped. They claim that continued installation of dry-shipped condensing units effectively allows the manufacture of otherwise banned HCFC-22 air-conditioning systems, increasing demand for HCFC-22 and undercutting the market for alternative refrigerants. One company does not believe dry-shipped condensing unit repairs can be properly addressed through a reduction in HCFC-22 allocation levels. Cost associated with the HCFC-22 refrigerant needed for the re-charging of the HCFC-22 system is quite small (<5% of the total servicing cost), so even a significant inflation of the cost of HCFC-22 will still have a minimal impact on the end-user's decision. Two commenters ask EPA to ban repairs using HCFC-22 dry-shipped condensing units, one explicitly asking for this action in lieu of further reducing HCFC-22 production. Another commenter is concerned about the negative effects of dry-shipped condensing units on equipment efficiency.

One joint comment from several environmental groups indicated that the market for dry-shipped HCFC-22 units is expanding rapidly; however, no data were provided. The commenters express concern that because newly-produced HCFC-22 is so cheap, service technicians are venting HCFC-22 from broken units, installing dry-shipped units in their place, and then charging the unit with virgin HCFC-22.

EPA received seven comments saying installation of dry-shipped condensing units does not significantly affect the phaseout and/or that dry-shipped HCFC-22 condensing unit repairs should not be banned. These commenters believe dry-shipped condensing units are providing consumers a legal, affordable repair option, and thus not actually increasing demand for HCFC-22 or displacing the sale of new systems. They contend that the primary application of the uncharged HCFC-22 replacement condensing units is as a service option to major compressor and coil failures. While two of the equipment manufacturers who do not support a ban on dry-shipped unit repairs also do not support reduced allocations of HCFC-22, another equipment

manufacturer believes that addressing the availability of the refrigerant is the appropriate driver for phasing out virgin HCFC-22, and that the installation of dry-shipped HCFC-22 condensing units does not have a negative effect on the phaseout. Another commenter suggests that if EPA has verifiable evidence that the servicing or repair of HCFC-22 appliances is resulting in increased emissions of the refrigerant, then EPA should consider extending the leak repair requirements to all appliances, not just appliances with a refrigerant charge greater than 50 lbs.

Five additional comments discuss HCFC-22 condensing units in more general terms. One organization suggests that EPA consider that most dry-shipped condensing units are being sold and installed with multi-year warranties, which may require a revision to EPA's servicing tail analyses if HCFC-22 replacement refrigerants are not approved by the compressor and equipment manufacturers for warranty servicing beyond 2015. Two other commenters state that the installation of HCFC-22 condensing units affects the need for HCFC-22. One commenter states that contractors prefer selling new R-410a systems instead of repairing older systems, since it is much more profitable, but that American consumers are struggling to pay bills. One commenter states that further reductions in consumption allowances might discourage installation and field charging of new condensing units with HCFC-22. The commenter also states that continued installation of such units will only increase the challenge of meeting the 2015 stepdown and in turn increase emissions of HCFC-22 to the atmosphere.

The issue of whether repairs involving the installation of dry-shipped HCFC-22 condensing units "affects the phaseout" can be broken into several questions. First, do repairs involving installation of dry-shipped HCFC-22 condensing units increase demand for HCFC-22? Second, do such repairs slow transition from HCFC-22 equipment to equipment using non-ODS alternatives? And finally, does this practice affect EPA's ability to stop the production and importation of virgin HCFC-22 by January 1, 2020?

Based on comments, there is no industry consensus on each of these questions. Specific responses to each comment are included in the Response to Comments found in the docket for this rulemaking. However, given the paucity of concrete quantifiable information on this subject currently available to the Agency, EPA is not ready to determine whether the installation of dry-shipped HCFC-22 condensing units will affect EPA's ability to phase out HCFC-22 by 2020. The limited data received to date suggest that it will not. EPA did not propose to ban dry-shipped condensing units in the proposal and is not taking such action in this final rule. For purposes of future rulemakings, EPA is still interested in quantifiable information on the number of dry-shipped condensing units being shipped, whether they are being used as a repair in lieu of a compressor or motor replacement, and whether and to what extent condensing unit replacements extend the life of an existing system. EPA will continue to evaluate the issue as it develops future regulations.

6. How Is EPA Addressing the Court's Decision with Regard to 2010 HCFC Allowances?

As noted in the proposed rule, EPA interprets the *Arkema* decision as applying, at a minimum, to the baseline and calendar-year allowances for 2011-2014. The agency took comment on whether to interpret the decision as applying to the 2010 allocation, and if so, how allowances in future control periods might be adjusted to reflect this. EPA also took comment on (1) whether it should provide recoupment allowances for HCFC-22 and HCFC-142b, or just HCFC-22 allowances, and (2) whether it should provide recoupment for production and consumption, or just consumption allowances. In this final action, EPA concludes that it has an obligation to consider 2010 allowances in responding to the Court's remand and that recoupment for both HCFC-22 and HCFC-142b production and consumption allowances is an appropriate response to the Court's holding that the agency committed legal error in deciding not to carry the 2008 transfers forward when it established the baselines for the current regulatory period.

EPA received 13 comments in opposition to recoupment. Four comments specifically

state that it is too late to address 2010 allowances, since the Court's mandate did not issue until 2011, and allowances are only good for the calendar year in which they are issued. Two comments assert that providing recoupment allowances would allow for banking or transferring of allowances to later years, which is at odds with the CAA and EPA regulations. Most of these comments point out that some allowances conferred in 2010 actually went unused in that year, and that EPA's current proposal to reduce allowances in 2012-2014 is further rationale for not providing additional allowances to compensate for any perceived lost opportunity in 2010. They point to EPA's statement in the proposal that not providing recoupment would have advantages for the environment, public health, and the goal of encouraging reclamation. They assert that there was an oversupply of HCFC-22 allowances in 2010, that Arkema and Solvay were not harmed in 2010, and that recoupment allowances would constitute a windfall. They refer to the Court's denial of Arkema's and Solvay's motions for a stay of the 2009 Final Rule as evidence that these companies were not harmed. One commenter also asserts that if Arkema and Solvay believe they are entitled to compensation, they must file a claim for compensation under the Tucker Act, 28 U.S.C. 1491. Finally, four comments cite that providing recoupment distorts market share, in contradiction to past EPA policy and the *Arkema* decision as it relates to vested rights.

On the other hand, the two companies that would benefit most from recoupment, Solvay and Arkema, state that EPA should provide recoupment and that the agency must do so in order to comply with the Court's decision in *Arkema*. Solvay states that EPA deprived it of its rightful allowances by failing to recognize its permanent inter-pollutant trades in the 2009 Final Rule and that recoupment is necessary to remedy that error. Arkema asserts that its losses were significant because of its inability to compete effectively in the after-market, stockpile material for sale in later years, and sell other refrigerants to one-stop shoppers.

The primary rationale the commenters present in favor of providing recoupment is that when an agency “...commits legal error, the proper remedy is one that puts the parties in the position they would have been in had errors not been made,” (*AT&T Corp. v. FCC*, 448 F.3d 426, 433 (D.C. Cir. 2006) (*quoting Exxon Co. v. FERC*, 182 F.3d 30, 48 (D.C. Cir. 1999))). The Court has further held that the proper remedy to an error is “to put the victim of the agency ‘error in the economic position it would have occupied but for the error,’” (*Ethyl Corp. v. Browner*, 67 F.3d 941, 945 (D.C. Cir. 1995) (*quoting Delta Data Sys. Corp. v. Webster*, 744 F.2d 197, 206-07 (D.C. Cir. 1984))).

Arkema contends that providing recoupment for losses would not require improper retroactive action. It states that because there is a strong equitable presumption in favor of retroactivity that would make the injured party whole, EPA can make a correction that goes back to the time the agency error occurred (*Exxon Co. v. FERC*, 182 F.3d 30, 48 (D.C. Cir. 1999)). In addition, the commenter argues that in this circumstance EPA may go beyond its otherwise applicable statutory authority. The commenter states that each agency has “general discretionary authority to correct its legal errors,” which extends to imposing retroactive changes, even when the statute does not expressly and affirmatively authorize the agency to do so in the first instance (*Natural Gas Clearinghouse v. FERC*, 965 F.2d 1066, 1073 (D.C. Cir. 1992)).

As expressed in the proposed rule, EPA’s preferred approach to the 2010 allocation was not to provide recoupment. However, EPA reviewed comments and considered the policy and legal aspects of providing or not providing recoupment. In particular, EPA considered the following questions: (1) does EPA have the obligation to address 2010 allowances in light of the Court’s decision in *Arkema*, and (2) does EPA have the ability to provide some form of compensation that would remedy the retroactive aspects of the 2009 Final Rule with respect to 2010? EPA believes that the answer to both questions is “yes.”

First, EPA believes it has an obligation to address 2010 allowances in light of the Court's decision in *Arkema*, to the extent feasible given the design and structure of this program. The Court stated that the 2009 Final Rule was, in part, "impermissibly retroactive" because "it attempted to undo the Petitioners' inter-pollutant baseline transfers" based on what the Court saw as a "new interpretation of section 607" of the Clean Air Act. The Court vacated the rule "insofar as it operates retroactively" and remanded the case "for prompt resolution," (*Arkema*, 618 F.3d. at 25). EPA believes that on remand, it must put allowance holders in the position they would have occupied had the agency reflected the Petitioners' inter-pollutant baseline transfers in the 2009 Final Rule (*AT&T v. FCC*, 448 F.3d 426 (D.C. Cir. 2006); *Exxon Co. v. FERC*, 182 F.3d 30 (D.C. Cir. 1999)). As noted in the proposal, it is appropriate for EPA to consider the 2010 allocation on remand whether or not the Court's decision had the effect of vacating the 2010 allowances. The Court clearly held that the baselines used in the 2009 Final Rule were invalid, and the 2010 allocation relied on those baselines.

Second, EPA believes it is feasible to provide compensation for lost 2010 allowances in the form of recoupment allowances, even though the 2010 period has ended and all 2010 allowances have expired. As explained in the proposed rule, EPA allocates HCFC production and consumption allowances for specific calendar years: They are valid for that year only. Such allowances cannot be banked or borrowed. Therefore, EPA cannot provide meaningful compensation by issuing additional 2010 allowances since they would be void upon issuance. In the narrow circumstance of responding to the Court's decision, however, EPA finds it appropriate to issue a corresponding number of allowances in later years to make up for the 2010 allowances that companies would have received if EPA had reflected the Petitioners' inter-pollutant baseline transfers in the 2009 Final Rule. These recoupment allowances are designed to compensate for lost opportunities to produce or import HCFCs during 2010 for sale in either 2010 or a later year.

In responding to concerns that this is effectively allowing for banking or a transfer of allowances from 2010 to a later year, EPA disagrees. While EPA does not allow banking of *allowances* beyond the control period in which they are issued, nothing in the regulations bans companies from producing or importing HCFCs with allowances and then storing the material over time. Companies receiving recoupment were deprived of their ability to import and/or produce HCFCs in 2010 at a level consistent with the Court’s decision in *Arkema*. Had they received the requisite level of allowances in 2010, they could have expended them during 2010 to produce or import HCFCs and banked those HCFCs until at least the years covered by this rulemaking. EPA also disagrees with one commenter’s characterization of recoupment as an effective transfer of 2010 allowances to later years. Contrary to the commenter’s assertion, EPA did not adopt this characterization in the proposal, but instead simply pointed out that the regulations do not allow banking or borrowing of allowances. The commenter quotes section 607(a), which states that EPA regulations must ensure that transfers “will result in greater total reductions in the production in each year of . . . class II substances than would occur in that year in the absence of such transactions.” The commenter asserts that if recoupment is provided, the aggregate allowance total will be higher than it would have been if no recoupment were provided. However, EPA disagrees that section 607(a), which is titled “Transfers,” has any application to this situation. Section 607(a) refers specifically to “transactions under the authority of this section.” An EPA rulemaking providing allowances is not such a transaction. The transactions in question are the “transfers” and “trades” within or between companies explicitly discussed in section 607. EPA has implemented section 607(a) by requiring an offset for all intra-company and inter-company transfers. See, e.g., 40 CFR 82.23(a)(i)(G).

Additionally, commenters assert that providing recoupment allowances would mean taking allowances away from others or distorting market share. One commenter said that providing recoupment is in violation of the *Arkema* decision, asserting that a company’s

allowances, or its share of allowances, are a vested right. EPA disagrees with this comment on both factual and legal grounds. First, as a result of the *Arkema* Court's partial vacatur of the 2009 Final Rule, there are currently no production or consumption allowances for HCFC-22 in 2012-2014. This final rule is filling a gap, rather than reshuffling existing allowances or existing market share. Second, even in the context of today's allocation, EPA is not allocating fewer allowances to one company for the purpose of allocating more to a different company. EPA is allocating a fixed percentage of baseline to each baseline holder at a level that in the aggregate is expected to meet servicing demand, taking into account the amount of such demand that can be met through other sources. EPA is then allocating recoupment allowances to certain companies on top of that fixed percentage allocation. Regarding market share, the allocation of recoupment allowances is limited to two years; thus, as a practical matter, it is unlikely to cause a permanent shift in market share. In addition, market share is not a simple reflection of EPA's allocation of allowances: for example, some companies buy or sell allowances and thus increase or decrease the volume of their business in a particular HCFC or HCFCs generally.

Furthermore, EPA takes issue with the commenter's characterization of the *Arkema* decision. In *Arkema*, the Court held that the petitioners had a vested right in transferred baselines where EPA had taken affirmative steps to approve the transfers by issuing non-objection notices. The commenter attempts to broaden the decision to state that allowance holders have vested rights in any and all allowances issued under the stratospheric ozone program, and in addition, to a specific market share or value attached to those allowances. EPA disagrees with this broad reading and believes the Court's ruling is closely tied to its factual findings concerning the 2008 transfers. This issue is discussed further at section IV.A.1.

Two commenters state that there was a significant oversupply of HCFC allowances in 2010, that the petitioners in *Arkema* were not harmed by the 2010 allocation in the 2009 Final Rule, and that they would receive a windfall if EPA were to provide recoupment allowances.

However, the fact that not all HCFC allowances were used in 2010 does not mean that particular companies were not harmed. Companies' individual situations and business plans may differ. Also, although the commenter cites the Court's denial of the motions to stay the 2009 Final Rule as evidence that petitioners were not harmed in 2010, harm to the moving party is only one of the criteria considered by a court in reviewing a stay motion. Thus, it is erroneous to assume that the Court's denial equates to a ruling that petitioners suffered no harm.

Several commenters stated that providing recoupment allowances would harm human health or the environment; however, this action as a whole protects human health and the environment by allocating significantly fewer allowances in 2012-2014 than the agency allocated in the 2009 Final Rule. Viewed in relation to that rule, EPA is reducing the total number of HCFC-22 consumption allowances (after providing for recoupment) by more than 31,100 MT over those three years. As a result, providing recoupment does not increase the allowed amount of HCFC-22 production and importation for U.S. use relative to the 2009 Final Rule. Even with recoupment, total U.S. consumption will be at least 55 percent below the Montreal Protocol consumption cap. This overall decrease in consumption also increases the incentives for recovery and reclamation. In addition, as noted in the proposal, the amount of recoupment being granted (329 ODP-weighted MT of allowed HCFC consumption and 280 ODP-weighted MT of allowed HCFC production) is smaller than the number of allowances that were not used by allowance holders in 2010 (approximately 425 ODP-weighted MT of HCFC consumption allowances and approximately 930 ODP-weighted MT of HCFC production allowances). EPA's response to additional comments on whether to provide recoupment can be found in the Response to Comments.

The agency presented four possible options with regard to recoupment for 2010: (1) providing recoupment allowances in 2013 *in addition* to (i.e., on top of) the aggregate level of production and consumption; (2) allocating recoupment allowances over two years (2013-2014)

in addition to (i.e., on top of) the aggregate level of production and consumption; (3) allocating recoupment allowances *from* the aggregate level of production and consumption over two years (2013-2014); and (4) not issuing recoupment allowances. Five comments specifically support one or more of these options. One comment supports option 1, two comments support option 3, and two comments support option 4. Two additional comments do not directly support an option, but raise concerns with options 1 and 2.

EPA stated in the proposed rule that if it decided to issue recoupment, it would prefer option 1. However, after reviewing comment and considering the options further, the agency believes option 2 is the best approach for ensuring a smoother path towards 2015, when U.S. consumption and production of all HCFCs must be at or below 10% of baseline under the Montreal Protocol. In addition, it does not reduce the number of allowances available to companies not receiving recoupment. Also, in light of EPA's decision to reduce the overall HCFC-22 allocation significantly in relation to the 2009 Final Rule, EPA can adopt option 2 while still issuing fewer consumption allowances in 2013 and 2014 than it did under the 2009 Final Rule.

Option 1 could flood the market in 2013, providing significantly more allowances in that one year than in either 2012 or 2014, creating an even more significant drop-off in the number of allowances between 2013 and 2014. EPA also has serious concerns about option 3. Commenters in support of option 3 state that companies were "on notice" that 2010 allowances were in dispute before the Court, so EPA should reduce allowances for companies not receiving recoupment to make Arkema and Solvay whole. However, the court rejected petitioners' stay motion and stayed its own mandate, with the result that companies were operating under the 2009 Final Rule for all of 2010. Thus, companies that produced or imported HCFCs during 2010 using consumption and production allowances received under the 2009 Final Rule were acting in accordance with the regulations in effect at that time.

Commenters in support of option 3 also claim that since refrigerant customers prefer to purchase all refrigerants from one supplier, and they could not provide sufficient quantities of HCFC-22 to some of their customers, the 2009 Final Rule resulted in a loss of sales of other refrigerants during 2010. EPA strongly believes that if a company loses its ability to sell to one-stop shoppers when it loses allowances, the inverse should also be true: Providing additional allowances in 2013 and 2014 equal to the amounts lost in 2010 should provide approximately the same ability to compete for sales to one-stop shoppers as was lost in 2010.

Only two comments addressed whether EPA should provide recoupment for both HCFC-22 and HCFC-142b, or just HCFC-22. One commenter supported providing recoupment for both substances, as it ensures traceability and consistency. The other commenter believes EPA should provide recoupment for HCFC-142b based on a total allowance pool of 118 metric tons (the amount allocated for 2010 in the 2009 Final Rule), instead of using a total allowance pool of 463 MT (the amount that results from the revised baselines, which are the same as the baselines proposed in 2008). According to the commenter, this means that the agency need only provide 69.8 metric tons of HCFC-142b production allowances in recoupment.

EPA does not agree with the commenter that it should scale HCFC-142b recoupment production allowances to match the exact amount allocated in 2010. The agency is providing recoupment production allowances based on what it proposed in 2008 (73 FR 78680). In 2008, the percent of baseline was the same for both consumption and production. EPA is therefore using the baseline amount and percentage proposed in 2008 to calculate recoupment for HCFC-142b production. The HCFC-142b production baseline is much larger than the consumption baseline (when accounting for the 2008 transfers), so the resulting 2010 allocation would have been much larger, while the consumption allocation would have been approximately the same under either baseline scenario. Issuing recoupment based on the 2008 proposal results in approximately 397 MT of additional HCFC-142b production allowances. Since manufacturing

HCFC-142b in the U.S. for domestic use requires production *and* consumption allowances, the agency anticipates that the only potential increase in HCFC-142b production as a result of recoupment would be for export.

One commenter encouraged EPA to account for a company's unused allowances from 2010 if EPA is providing that company with recoupment allowances. To do this, EPA would need to divulge information about how each company uses its allowances: such company-specific information has never been disclosed in the HCFC phaseout program, and EPA would need to consider claims of confidentiality before taking such a step. Also, EPA does not believe it is necessary to account for a company's unused allowances because the agency is providing allowances to make up for the lost *opportunity* to produce or import HCFCs, not the specific usage or lack thereof. As a result, EPA is not adjusting for a company's unused allowances in 2010.

To effectuate option 2, the agency is issuing half of the recoupment allowances for each company in 2013 and the other half in 2014 and is amending the regulatory text at 40 CFR 82.16(a) accordingly. Recoupment allowances allocated for 2013 and 2014 will function in the same way as other calendar year allowances: They can be used only in the calendar year for which they are issued and will expire at the end of that calendar year. The agency believes the issuance of these recoupment allowances discharges its obligation to consider the 2010 control period in responding to the remand in *Arkema*. Table 1 lists the companies receiving recoupment, the substance, and the total number of recoupment allowances:

Table 1 – Final Recoupment Allowances

Company	Chemical	Consumption (kg)	Production (kg)
Arkema	HCFC-22	4,749,692	4,611,848
DuPont	HCFC-142b	2,339	0
Honeywell	HCFC-142b	58,291	107,097

Solvay Fluorides	HCFC-22	1,157,895	0
Solvay Solexis	HCFC-142b	0	289,800

A full summary and response to all other comments are included in the Response to Comments.

7. Does EPA Have to Provide the Same Percentage of Baseline for Production Allowances as It Does for Consumption Allowances?

In considering how to allocate HCFC-22 production allowances for 2012-2014, the agency proposed to decouple production and consumption baseline percentages. Historically, there has only been one table at 40 CFR 82.16, which lists the percentage of baseline (both production and consumption) that every baseline allowance holder is issued each year. EPA proposed to create two tables, and to allocate a different percentage of baseline for production than for consumption. Decoupling would allow the agency to reduce consumption allowances in relation to the 2009 Final Rule without having to make the same reductions to production allowances. EPA stated its interpretation that section 605(c) of the CAA does not preclude EPA from decoupling baseline percentages and requested comment on this issue. EPA received two comments specifically addressing whether the statute precludes decoupling.

Section 605(c) states that EPA must “promulgate regulations phasing out the production...of class II substances in accordance with [section 605],” subject to any acceleration under section 606. It further states that EPA must “promulgate regulations to insure that the consumption of class II substances in the United States is phased out and terminated in accordance with the *same schedule* (emphasis added)...as is applicable to the phase-out and termination of production of class II substances under [Title VI].” Because the phrase “same schedule” is not clear on its face, the agency considered three possible interpretations of the phrase “same schedule,” as explained in the proposal and in the 2011 Interim Final Rule. The

agency stated that interpreting “same schedule” as referring to the phaseout schedule that appears in section 605, as accelerated under section 606, would be most consistent with the statutory language and purpose. Examples of milestones in the phaseout schedule are the 2010 and 2015 phasedown steps. The agency clarified that it was not proposing to allow production in an amount that would be inconsistent with those phasedown steps, but simply proposing to allow a greater amount of production than consumption, with both amounts below the Montreal Protocol and CAA caps. The one company that provided comment on this matter agreed with the agency, and said that it does not believe that production and consumption allowances are somehow tied to the same regulatory schedule (requiring the same number of allowances or percentages of baseline for production and consumption). Rather, the commenter states that production and consumption are tied to the same statutory and treaty schedule, and that the agency should provide for increased production.

The other comment on decoupling was from a group of environmental organizations, who supported a decrease in production allowances relative to the 2009 Final Rule. They believe that the language in section 605(c) equates the quantity of consumption and production allowances and cannot be interpreted to allow more production than consumption in a given year.

EPA disagrees that the language in 605(c) equates the quantity of consumption and production allowances. EPA has never allocated the same quantity of production and consumption allowances, only the same percentage of baseline. The agency would have to provide different percentages of baseline for calendar-year consumption and production allowances to keep the allowance quantities the same since the number of aggregate baseline production allowances is not equal to the number of aggregate baseline consumption allowances. Additionally, EPA does not believe there is a single “natural reading” of section 605(c), as the comment suggests. Rather, the language is ambiguous. As explained in the proposed rule, there

are at least three possible interpretations. EPA's interpretation that the word "schedule" in section 605(c) refers to the schedule that appears in section 605, as accelerated under section 606, is reasonable. In section 606, Congress used the word "schedule" to refer to a more-stringent schedule than the schedule set forth in section 605: "The Administrator shall promulgate regulations . . . which establish a schedule for phasing out the production and consumption of . . . class II substances . . . that is more stringent than set forth in section 7671d [section 605]." The original section 605 schedule limited production and consumption to baseline quantities in 2015 and required a complete phaseout (with some exceptions) in 2030. It is logical that Congress would have intended the more-stringent schedule established under section 606 to have a similar structure: That is, to cap or eliminate production and consumption on certain milestone dates. EPA in fact established just this type of schedule at 40 CFR 82.16(b)-(g). EPA has discretion in managing the allowance system to achieve this schedule. Therefore, the agency believes it can issue calendar-year consumption and production allowances using different percentages of baseline, as long as it complies with the overall schedule set by Congress, as accelerated under section 606.

Discussion of EPA's policy decision to decouple baseline percentages is found in section IV.C.2.

C. How Many HCFC-22 and HCFC-142b Allowances Is EPA Allocating in 2012-2014?

The agency is revising the tables in 40 CFR 82 that together specify the production and consumption allowances available during specified control periods. The tables at sections 82.17 and 82.19 apportion baseline production allowances and baseline consumption allowances, respectively, to individual companies for specific HCFCs during a particular regulatory period. Complementing these tables, the table at section 82.16 lists the percentage of baseline allocated to allowance holders for specific control periods. In this rulemaking, EPA is (1) retaining this framework of complementary tables, (2) establishing baselines for 2012-2014 identical to those

established in the 2011 Interim Final Rule (76 FR 47451), (3) granting allowances based on percentages of baselines in a manner that achieves the 2010 phaseout step and lays the groundwork for the next phaseout step in 2015, and (4) providing recoupment allowances.

In the 2009 Final Rule, 34.1 percent, 30.1 percent, and 26.1 percent of each company's HCFC-22 baselines were allocated for 2012, 2013, and 2014, respectively. The allocation for HCFC-142b was 0.47 percent of baseline. As discussed in section III.D. of this final rule, EPA interpreted the Court's vacatur as applying to the HCFC-22 and HCFC-142b allocations for each of these years as well as the baselines. EPA is putting in place new allocations through this rulemaking, and proposed various allocation amounts for consumption and production allowances during the remainder of this regulatory period.

1. How Many HCFC-22 Consumption Allowances Is EPA Allocating in 2012-2014?

The 2009 Final Rule allocated 40,700 MT of HCFC-22 consumption allowances in 2012, which was 76.5 percent of estimated servicing need, and 59 percent of the total 2012 HCFC consumption cap. EPA arrived at this amount by estimating the amount of servicing need, taking recovery and reclamation into consideration. EPA then finalized an allocation that was 12,500 MT below estimated need. Using a similar approach, EPA proposed to allocate 11 to 38 percent less in 2012 relative to the 2009 Final Rule (see the Adjustment Memo in the docket for the rationale behind the proposed reduction). In the 2009 Final Rule, 2013 and 2014 consumption allocations were 35,900 MT and 31,100 MT, respectively. The agency proposed to allocate 13 to 42 percent less in 2013 and 15 to 47 percent less in 2014.

As discussed in sections IV.B.1. and IV.B.2., comments directly addressing reclamation, recovery, and reuse, and the availability of existing inventory from past years generally support EPA's estimates of the inventory and recoverable material that are available each year to meet HCFC-22 servicing need. The agency also received 54 comments (some signed by multiple organizations) that address the overall consumption allocation in more general terms. Forty-two

comments support the decrease in allowances relative to the 2009 Final Rule and 13 comments oppose the decrease. In addition to these comments, EPA received 47 additional comments that oppose a decrease in HCFC-22 production, but use the word “production” in a general sense. Upon reading, EPA believes the intent was to oppose a decrease in consumption, or “production for U.S. use.”

Generally, comments in support of the reduction state that a lower allocation will increase the value of HCFC-22, resulting in more reclamation and increased incentives to recover HCFC-22 from existing systems. A lower allocation encourages an orderly phaseout and still provides enough allowances to meet servicing needs. Supporters of a lower allocation state that a reduction is justified because of lower-than-expected need for HCFC-22 and the availability of existing inventory from past years. Three environmental organizations state that a reduction is (1) necessary to protect human health and the environment, and (2) practicable in terms of technology, safety, and availability of alternatives.

Comments supporting a higher HCFC-22 consumption allocation cite concerns about higher price, limited access to refrigerant and unexpected costs, all of which could lead to premature system retirements. Others point to U.S. compliance with the Montreal Protocol under the 2009 Final Rule, and are against any reductions to those allocation levels.

EPA responds to individual comments in the Response to Comments, but generally agrees that the amount of HCFC-22 provided in the 2009 Final Rule was too high to foster an orderly transition. In 2015, the U.S. must reduce its production and consumption of all HCFCs to below 10 percent of its historic HCFC baseline under the Montreal Protocol. By 2020, HCFC production and consumption must be below 0.5 percent of the historic baseline and under EPA regulations HCFC-22 may not be produced or imported at all. Rather than create a drastic change in 2015, the agency’s goal is to finalize an allocation for 2012-2014 that fosters the market transition necessary to prevent future disruptions.

Considering that objective, EPA is providing allowances in this final rule based on its assessment of market conditions. For 2012, the timing of this rule means that EPA is looking back at actual events during 2012 rather than projecting future needs. The agency is issuing 2012 HCFC-22 consumption allowances at the lowest proposed amount, because that amount is consistent with the industry's actual operation in 2012. The appropriateness of this level is supported by the fact that EPA has not received any reports of HCFC shortages during the 2012 air-conditioning season. At the same time, this level is commensurate with the amount of consumption authorized in the January 20, 2012, No Action Assurance provided by Cynthia Giles, Assistant Administrator for Enforcement and Compliance Assurance. EPA selected this amount as reasonable for purposes of the No Action Assurance, recognizing that it was within the proposed range. Issuing allowances at the No Action Assurance level enables companies to account for consumption that occurred in 2012 in accordance with the No Action Assurance. As stated in the No Action Assurance, any HCFCs produced and imported in 2012 pursuant to the No Action Assurance count towards a company's allocation and require the expenditure of 2012 allowances.

In 2013-2014, EPA is making reductions for existing inventory and for reclamation and reuse, given the support of comments on the agency's analysis and additional data provided during the comment period. EPA is not reducing allowances to account for recovery and reuse in the large retail food sector because there were not sufficient comments or data, and the agency already accounts for supermarket recovery (but not in-house reuse) in its Vintaging Model. With these adjustments, the amount of allowed consumption in 2012-2014 is 29 percent below amounts in the 2009 Final Rule for the same period. The agency believes that the amounts in this rulemaking will increase market incentives to properly manage and recover HCFC-22 while still allowing for servicing of existing HCFC-22 systems.

EPA is finalizing the following HCFC-22 consumption allocations for 2012-2014:

2012: 17.7 percent of baseline, totaling approximately 25,100 MT

2013: 18.0 percent of baseline, plus 2,954 MT of recoupment, totaling approximately 28,500 MT

2014: 14.2 percent of baseline, plus 2,954 MT of recoupment, totaling approximately 23,100 MT

With this amount, EPA's total HCFC consumption allocation in 2012-2014, including recoupment, is at least 55 percent below the Montreal Protocol cap each year, and is below servicing need as estimated in the *Servicing Tail Report*.

2. How Many HCFC-22 Production Allowances Is EPA Allocating in 2012-2014?

In the proposed rule, EPA described three options for providing production allowances. In considering each of these options, EPA recognized that taking the 2008 transfers into account in accordance with the *Arkema* decision affects not only the HCFC-22 consumption baseline, but the HCFC-22 production baseline as well. Two options would have decoupled baseline percentage allocated for production and consumption. These options provided (1) approximately the same amount of production allowances as the 2009 Final Rule or (2) the same percentage of baseline as the 2009 Final Rule. The third option would have kept production and consumption allowances at the same percentage of baseline, so the resulting production allocation would be dependent on the final consumption baseline percentage. Option 3 is reflected in the January 2012 and January 2013⁸, No Action Assurances sent to allowance holders by the Assistant Administrator for Enforcement and Compliance Assurance. EPA took comment on providing the following percentages of baseline production in 40 CFR 82.16:

Option 1: 28.7% in 2012, 25.3% in 2013, 21.9% in 2014

Option 2: 34.1% in 2012, 30.1% in 2013, 26.1% in 2014

Option 3: 17.7% to 25.5% in 2012, 14.7% to 22.1% in 2013, 11.6% to 18.5% in 2014

⁸ The January 2013 No Action Assurance also preserved all recoupment options.

Under option 1, the aggregate allocation in 2012 would be about two percent lower than in the 2009 Final Rule (37,050 MT in the proposed rule vs. 37,721 MT in the 2009 Final Rule). The intent would be to keep the aggregate number of allowances at about the same level as the amount finalized in the 2009 Final Rule. The memo to the docket for this rulemaking titled “Effects of HCFC-22 and HCFC-142b Baseline Changes: 2009 Final Rule vs. 2011 Proposed Rule,” (Baseline Memo) explains these slight differences. While this option would keep the aggregate number of allowances at about the same level, U.S. production could actually fall under this option, because under *Arkema* a greater share of the allowances would go to a company that does not produce in the U.S.⁹

Under option 2, the production baseline percentage would be the same as in the 2009 Final Rule. The petitioners in *Arkema* would receive the benefit of their 2008 baseline transfers; other companies with production baselines would get the same number of production allowances as they received in the 2009 Final Rule, since their baselines did not change. While the percentage is the same as the 2009 Final Rule, since the aggregate production baseline is higher, the number of production allowances increases by 6,299 MT in 2012, 5,560 MT in 2013, and 4,821 MT in 2014. However, as noted above, this would not necessarily translate to an increase in production.

In addition to asking for comment on the two proposed decoupling options, the agency also asked for comment on several related matters. EPA asked for comment on whether, relative to the 2009 Final Rule, allocating the same percentage of baseline for production allowances, as proposed under option 2, would result in (1) an increase in U.S. consumption, (2) an increase in U.S. production, either for domestic use or for export, and/or (3) an increase in worldwide

⁹ Data submitted to the Greenhouse Gas Reporting program on byproducts of the HCFC-22 production process indicates that only three of the four companies holding production allowances produced HCFC-22 in 2010 and 2011 (see <http://ghgdata.epa.gov/ghgp/main.do> and the memo in the docket titled “2010-2011 Greenhouse Gas Reporting Program Data on HCFC-22 Production Byproducts”). While this company can transfer its allowances to another producer, the fact that they do not produce in the U.S. makes it unlikely that all calendar-year production allowances will be used.

production and/or consumption of HCFCs. EPA also invited comment on the implications of any such increase for the U.S. economy and the global environment, particularly as it relates to the smooth U.S. phaseout of HCFC-22.

EPA received nine comments on EPA's proposed production allocation. Six comments support a higher level of production allowances than consumption allowances (options 1 and 2) and three comments oppose a higher level of production allowances. EPA provides a complete summary of and response to all comments in the Response to Comments, but highlights and responds to most of the comments in this preamble.

Very few comments voiced a preference for a specific production option. However, two commenters specifically support option 2, which provides for the same percentage of baseline as provided in the 2009 Final Rule. Five commenters are in support of options 1 and 2 so that domestic companies can remain competitive in the global market. One commenter indicates U.S. companies could lose global market share if production allowances were not decoupled. Four commenters point out that allocating more production allowances than consumption allowances could allow for the possibility of more export, but will not lead to increased domestic consumption since consumption allowances limit the amount of newly-produced HCFC-22 entering the U.S. market. Comments also indicate allowing production in the U.S. could be environmentally beneficial if it displaces production at facilities that do not control byproduct emissions of hydrofluorocarbon (HFC)-23, which has a global warming potential of 14,800¹⁰. The comment cites the growth of HFC-23 emissions globally and indicates that facilities in Article 5 countries do not control HFC-23 emissions to the same degree as companies operating in the U.S. Since U.S. producers of HCFC-22 largely control their HFC-23 byproduct emissions, the comment states that production in the U.S., as opposed to other countries, could actually result in lower greenhouse gas emissions.

¹⁰ Source for the GWP of HFC-23: Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report: Climate Change 2007 (AR4)

Comments opposing options 1 and 2 note that the Protocol and domestic regulations already allow for additional production in order to serve basic domestic needs of developing countries in the form of Article 5 allowances. They argue that allowing more production than consumption may increase the global surplus of HCFC-22 and decrease price, thus discouraging appropriate handling of the gas. They argue this could lead to an increase in global use and emissions of HCFC-22. One commenter also states that if a reduction in consumption allowances is justified, so is a decrease in production allowances for the same reason.

EPA does not agree that options 1 and 2 increase environmental harm relative to the 2009 Final Rule. First, EPA would only be providing the same number of overall production allowances or the same percentage of baseline for production as in the 2009 Final Rule. In the proposal, EPA also noted that production of one kilogram of an HCFC requires both a production allowance and a consumption allowance (82.15(a)(1), (2)). Thus, leaving production allowances at the same percentage or at the same overall amount without a corresponding increase in consumption allowances cannot result in greater U.S. consumption. Also, in order to produce for export, a company must submit documentation to verify the export of an HCFC for which consumption allowances were expended in order to request a reimbursement of spent consumption allowances. The agency reviews the documentation and issues a notice to either deny or grant the request. Therefore, a company would not be able to produce more HCFC-22 unless it had exported an equal amount of material and been granted a refund of spent consumption allowances. Additionally, since HCFC consumption is capped globally under the Montreal Protocol, companies exporting HCFCs are constrained by the consumption caps established in the country receiving the material.

With regard to HFC-23, EPA has worked with industry through its HFC-23 Emission Reduction Partnership to encourage companies to reduce HFC-23 byproduct emissions from the manufacture of HCFC-22. In the 2010 U.S. Climate Action Report, the agency noted that

“despite a four percent increase in the production of HCFC-22 compared to 1990, EPA estimates that total HFC emissions in 2007 were significantly below 1990 levels. Compared to business as usual, EPA estimates the partnership reduced emissions by 17.8 Tg CO₂ Eq. in 2007,” (see page 55 of the *U.S. Climate Action Report 2010*, available in the docket). Currently, some HFC-23 emissions in Article 5 countries are mitigated through Clean Development Mechanism (CDM) projects using destruction technologies, namely thermal oxidation or plasma arc. However, not all HCFC-22 facilities are eligible to earn credits under CDM; therefore, a number of facilities may not have emission reduction technology installed. There are about 26 plants producing HCFC-22 in Article 5 countries. Approximately 17 plants have CDM projects that control HFC-23 byproduct emissions. The remaining nine plants may not have emissions control technologies installed. HCFC-22 production in the United States may provide environmental benefits in reduced HFC-23 emissions to the extent U.S. production supplants the Article 5 production in those specific plants that do not have HFC-23 byproduct destruction technologies installed.

Some commenters argue that EPA will increase the global supply of HCFC-22 by allocating more production than consumption allowances. EPA disagrees. First, by decreasing consumption allowances relative to the 2009 Final Rule, EPA is decreasing potential U.S. consumption of virgin material by more than 31,100 MT over 2012-2014. Even if every single additional production allowance was used for export, global consumption would still be at least 9,800 MT less than the allocations provided in the 2009 Final Rule if all other factors are constant. Because at least one company holding production allowances does not produce HCFC-22 in the United States, it is unlikely that every production allowance will be used. As a result, the net reduction in global consumption of HCFC-22 may be even greater. Finally, starting in 2013, Article 5 countries’ consumption of HCFCs is capped, which further limits global HCFC-22 demand (*see* Montreal Protocol Art. 5, para. 8 *ter.*). As noted below, EPA is issuing

production allowances using the same percentages as in the 2009 Final Rule only for the 2013 and 2014 control periods.

EPA is also concerned that decreasing production allowances for the remainder of the current regulatory period could deprive certain U.S. manufacturers of existing global business. Article 5 allowances already allow the export of HCFC-22; but only to Article 5 countries. Providing more production than consumption allowances could allow companies to continue exporting to non-Article 5 countries, which have the same overall Montreal Protocol phaseout schedule as the United States but may use a basket approach rather than a chemical-by-chemical approach to phasing out HCFCs. Also, using the same percentage of baseline as the 2009 Final Rule should allow companies to continue their exports to Article 5 countries, which are just beginning to phase out HCFCs. Since consumption allowances already limit production for U.S. use, EPA is providing the same percentage of baseline for HCFC-22 production as in the 2009 Final Rule beginning in 2013 to avoid a scenario in which U.S. manufacturers might have to decrease their production for global markets relative to the amount allowed under the 2009 Final Rule. As noted previously, U.S. production may provide environmental benefits when compared to production in plants that lack HFC-23 byproduct destruction technologies.

Recognizing the timing of this rule's signature, and the fact that Article 5 countries' HCFC consumption is not capped until 2013, the agency is adopting a different approach for 2012 than for 2013 and 2014. The agency is issuing 2012 HCFC-22 production allowances at the lowest proposed amount, because that amount is consistent with the industry's actual operation in 2012. The appropriateness of this level is supported by the fact that EPA has not received any reports of HCFC shortages during the 2012 air-conditioning season. At the same time, this level is commensurate with the amount of production authorized in the January 20, 2012, No Action Assurance provided by Cynthia Giles, Assistant Administrator for Enforcement and Compliance Assurance. EPA selected this amount as reasonable for purposes of the No Action Assurance,

recognizing that it was within the proposed range. Issuing allowances at the No Action Assurance level enables companies to account for production that occurred in 2012 in accordance with the No Action Assurance. As stated in the No Action Assurance, any HCFCs produced in 2012 pursuant to the No Action Assurance count towards a company's allocation and require the expenditure of 2012 allowances. EPA is finalizing production option 2 for 2013 and 2014.

In summary, EPA believes providing the same percentage of baseline as used in the 2009 Final Rule for production allowances in 2013-2014 (1) cannot lead to an increase in U.S. consumption, (2) allows U.S. producers to produce the same amount as under the 2009 Final Rule, with potential environmental benefits to the extent that production might otherwise occur in plants that lack HFC-23 byproduct destruction technologies, and (3) would not result in a global increase in production or consumption of HCFC-22 beyond the limits agreed to under the Montreal Protocol. In addition, the environmental benefits achieved by the reduction in consumption allowances outweigh any potential increase in U.S. production. As such, EPA is allocating the following amounts of HCFC-22 production allowances in 2012-2014:

- 2012: 17.7% of baseline, resulting in approximately 22,800 MT of HCFC-22 production
- 2013: 30.1% of baseline, plus 2,306 MT of recoupment, resulting in approximately 41,200 MT of HCFC-22 production
- 2014: 26.1% of baseline, plus 2,306 MT of recoupment, resulting in approximately 36,000 MT of HCFC-22 production

Combined with allowed production for other HCFCs, these finalized amounts are at least 36 percent below the Montreal Protocol production cap of 3,884.25 ODP-weighted MT.

3. How Many HCFC-142b Consumption and Production Allowances Is EPA Allocating in 2012-2014?

Establishing HCFC-142b baseline allowances that take into account the 2008 inter-pollutant transfers results in 2,047 MT of aggregate baseline consumption allowances and 9,444 MT of aggregate baseline production allowances. Consistent with the 2009 Final Rule, EPA proposed to allocate 100 MT of consumption allowances. To get to that level, EPA would allocate 4.9 percent of the aggregate consumption baseline, as reflected in the table at section 82.16.

Using the same percentage (4.9 percent) of the aggregate production baseline, EPA proposed to allocate 463 MT of HCFC-142b production allowances for each control period between 2012 and 2014. The aggregate allocation for production is higher than the amount allocated in the 2009 Final Rule (463 MT in this rule vs. 118 MT in the 2009 Final Rule). This is because the 2008 transfers out of HCFC-142b involved significantly more consumption allowances than production allowances. Taking those transfers into account decreases the HCFC-142b consumption baseline substantially but has a lesser impact on the HCFC-142b production baseline.

The agency received only four comments on HCFC-142b allocations. Two comments strongly support reducing HCFC-142b consumption and production allowances; one of these commenters states that HCFC-142b is only used in blends to service old CFC equipment. Of the other two comments, one supports the consumption allocation of 100 MT, noting that HCFC-142b is a critical component of a refrigerant blend, but that production allowances need not increase. The other commenter asks that EPA not lower the HCFC-142b production allocation to compensate for any increase in HCFC-22 production.

EPA did not propose to decrease HCFC-142b allowances in the proposed rule. The agency assessed the need for the chemical in the 2009 Final Rule and will revisit the need for HCFC-142b for servicing during the rulemaking for the next regulatory period. For this reason, the agency is finalizing its proposed consumption and production allocations for HCFC-142b.

There will be 100 MT of HCFC-142b consumption allowances and 463 MT of production allowances issued in the years 2012, 2013, and 2014. These allowance amounts are 4.9 percent of the HCFC-142b baselines, and keep the HCFC-142b consumption allocation approximately the same as in the 2009 Final Rule.

To provide recoupment to companies for lost opportunities in 2010, EPA is allocating a total of 61 MT of HCFC-142b consumption allowances and 397 MT of HCFC-142b production allowances in addition to the percentage of baseline issued. Since the agency is providing recoupment over two years, there will be an additional 30 MT of consumption allowances and 198 MT of production allowances in 2013 and 2014. See section IV.B.6. of this preamble for more discussion on recoupment allowances.

4. How Does the Aggregate Allocation for HCFC-22 and HCFC-142b Translate Entity-by-Entity?

For 2012-2014, EPA is setting production and consumption baselines for HCFC-22 and HCFC-142b on the same basis as in the 2009 Final Rule, except that EPA is making adjustments to reflect (1) the 2008 inter-pollutant transfers of baseline allowances deemed permanent by the Court, (2) inter-company, single-pollutant transfers of baseline allowances that occurred in 2010, and (3) changes in company names that occurred after the 2009 Final Rule was signed. All of these changes were made in the 2011 Interim Final Rule (76 FR 47451), and EPA proposed to do the same for 2012-2014. Applying the approach described above, EPA is apportioning production and consumption baselines for HCFC-22 and HCFC-142b to the following entities in the following amounts:

Table 2: Baseline Production Allowances of HCFC-22 and HCFC-142b in 40 CFR 82.17

Person	Controlled Substance	Allowances (kg)
Arkema	HCFC-22	46,692,336

	HCFC-142b	484,369
DuPont	HCFC-22	42,638,049
Honeywell	HCFC-22	37,378,252
	HCFC-142b	2,417,534
MDA Manufacturing	HCFC-22	2,383,835
Solvay Solexis	HCFC-142b	6,541,764

Table 3: Baseline Consumption Allowances of HCFC-22 and HCFC-142b in 40 CFR 82.19

Person	Controlled Substance	Allowances (kg)
ABCO Refrigeration Supply	HCFC-22	279,366
Altair Partners	HCFC-22	302,011
Arkema	HCFC-22	48,637,642
	HCFC-142b	483,827
Carrier Corporation	HCFC-22	54,088
Coolgas Investment Property	HCFC-22	1,040,458
DuPont	HCFC-22	38,814,862
	HCFC-142b	52,797
H.G. Refrigeration Supply	HCFC-22	40,068
Honeywell	HCFC-22	35,392,492
	HCFC-142b	1,315,819
Mexichem Fluor Inc.	HCFC-22	2,546,305
Kivlan & Company	HCFC-22	2,081,018
MDA Manufacturing	HCFC-22	2,541,545
Mondy Global	HCFC-22	281,824

National Refrigerants	HCFC-22	5,528,316
Refricenter of Miami	HCFC-22	381,293
Refricentro	HCFC-22	45,979
R-Lines	HCFC-22	63,172
Saez Distributors	HCFC-22	37,936
Solvay Fluorides	HCFC-22	3,781,691
Solvay Solexis	HCFC-142b	194,536
USA Refrigerants	HCFC-22	14,865

The finalized baselines listed above are identical to the tables presented in the 2011 Interim Final Rule (76 FR 47451).

V. How Is EPA Changing the Regulations Governing Transfers of Class II Allowances?

The agency is concerned about the possibility of companies undermining the HCFC chemical-by-chemical phaseout by performing inter-pollutant transfers in advance of future phaseout steps. EPA interprets the 2003 Final Rule, which established the transfer provisions at 40 CFR 82.23, as allowing only single-pollutant, inter-company transfers to be made on a permanent basis. Nevertheless, EPA recognizes that in *Arkema*, the Court found that “EPA’s practice under the 2003 Rule was to allow petitioners’ baseline transfers of inter-pollutant allowances” (618 F.3d at 8). Therefore, EPA clarified its current policy on inter-pollutant transfers in the 2011 Interim Final Rule (76 FR 47459). In January 2012, EPA proposed to modify the regulatory text to dispel any possibility of confusion in the future.

Through this final action, the agency is modifying 40 CFR 82.23 to address the duration of inter-pollutant transfers, and to reflect prior agency statements pertaining to inter-pollutant transfers of Article 5 allowances.

A. How Is EPA Changing the Regulations Governing Permanent Transfers of Class II Allowances?

Sections 607(b) and (c) of the CAA address inter-pollutant and inter-company transfers of allowances, respectively. Inter-pollutant transfers are the transfer (or conversion) of an allowance of one substance to an allowance of another substance on an ODP-weighted basis. Inter-company transfers are transfers of allowances for the same ODS from one company to another company. Section 607(c) also authorizes inter-company transfers combined with inter-pollutant transfers, so long as the requirements of both are met. The corresponding regulatory provisions for HCFCs appear at 40 CFR 82.23.

EPA proposed to modify section 82.23 to clarify that the agency will not approve future inter-pollutant transfers of baseline production allowances or baseline consumption allowances. EPA received two comments directly referring to this proposal. One comment supports EPA's proposed changes because it will prevent future manipulation of the allowance program. The commenter also believes the CAA prohibits permanent inter-pollutant transfers. Another commenter encourages EPA to reconsider its proposed changes and to allow for inter-pollutant baseline transfers if an allowance holder has historically made the transfers. EPA also received two comments on the 2012-2014 baselines that are relevant. Both commenters state that section 607 of the CAA prohibits baseline inter-pollutant transfers.

As discussed in the proposed rule, EPA remains concerned about the potential for future manipulation of the allocation system if inter-pollutant baseline transfers are allowed to affect a company's baseline in future regulatory periods. For example, a HCFC-22 producer or importer could dominate the HCFC-123 market in 2015 by converting its HCFC-22 baseline to HCFC-123 baseline in 2014. Given the different ODPs of HCFC-22 and HCFC-123 (0.055 and 0.02, respectively), converting one baseline allowance of HCFC-22 would result in 2.75 baseline allowances of HCFC-123. Also, since companies hold many more HCFC-22 baseline allowances

than HCFC-123 baseline allowances, converting those HCFC-22 baseline allowances would have an overwhelming effect on the current HCFC-123 baseline allowance holders and on the overall market.

As another example, in 2020 EPA will no longer be issuing HCFC-22 production or consumption allowances (see section 82.16(e)). EPA expects that companies with only HCFC-22 or HCFC-142b allowances would no longer be producing or importing HCFCs at that date. If EPA were to allow inter-pollutant baseline transfers that carried forward into the new regulatory period, companies with HCFC-22 baselines could convert them all to baselines for HCFC-123 in 2019. Perpetuating the HCFC-22 baselines in a new form would be counter to the design of the chemical-by-chemical phaseout, under which the baseline allowances for a particular chemical are intended to drop out of the system upon the phase-out of that chemical. Thus, there are important policy reasons for not taking inter-pollutant transfers from prior regulatory periods into account in establishing baselines for new regulatory periods.

EPA has been clear in its past statements about its policy on what happens to allowances when a chemical is phased out. In the 1999 Advanced Notice of Proposed Rulemaking (“1999 ANPRM”, 64 FR 16373), EPA discussed options for establishing the HCFC allocation system. Referring to HCFC-141b, which was phased out in 2003. EPA stated at 64 FR 16378:

It is important to note that, under any scenario, when the phaseout date for HCFC-141b is reached in 2003, all HCFC-141b consumption (production + imports-exports) will cease. Those who did not participate in the HCFC-141b market will not be affected in 2003. However, those who did participate in the HCFC-141b market— through, for example, producing or importing HCFC-141b—would no longer receive any allowances associated with their historic HCFC-141b activity, and thus any authorization to produce or import HCFC-141b. *Likewise, any company that, through a baseline trade, received allowances associated with historic HCFC-141b would no longer receive any allowances associated with the baseline trade in 2003* (emphasis added).

In the 2001 Notice of Proposed Rulemaking for the HCFC allocation system (“2001 NPRM,” 66 FR 38064), EPA elaborated further on what happens when a chemical is phased out under a chemical-by-chemical phaseout at 66 FR 38068-69:

On the first HCFC phaseout date of 2003, those companies that received baseline consumption allocations (or received a permanent baseline transfer)...of HCFC-141b would subtract that portion from their total consumption allocation. If permanent inter-pollutant trades had been made, an amount equal to the ODP-weighted kilograms of baseline HCFC-141b allowances that had been received in the transfer would be deducted from the baseline allocation...*The same would occur in [later years] for the relevant chemicals being phased out* (emphasis added).

Finally, in the 2003 Final Rule establishing the HCFC phaseout, EPA stated its position at 68 FR 2835: “EPA will allow permanent transfers of baseline allowances with those allowances disappearing at the phaseout date for the specific HCFC, regardless of what inter-pollutant transfers had taken place.” Because EPA has been clear on this point that baseline allowances associated with a specific HCFC—regardless of their current owner or current status—disappear when that HCFC is phased out, the agency continues to believe allowing inter-pollutant baseline transfers only on an annual basis is appropriate.

The commenter objecting to the proposed changes to the transfer regulations cited several issues that EPA should consider. The commenter cites its past practice of annually transferring its HCFC-142b allowances to HCFC-22 and the need to consider the precedent this proposed change might have. The agency notes that prohibiting inter-pollutant baseline transfers in no way precludes the commenter, or any allowance holder, from continuing to make annual inter-pollutant transfers. However, when EPA established the “worst-first” HCFC phaseout, the goal was to encourage companies to move out of HCFCs, not to continually produce or import HCFCs by switching from one chemical to another.

Additionally, the commenter envisions a scenario where an allowance holder could change the focus of its business to produce and sell a substance that does less harm to the environment. While an allowance holder could move to an HCFC that is less harmful to the ozone layer, the switch results in no environmental benefit (excepting the 0.1 percent transfer offset) if all of the transferred allowances are used. Since transfers are weighted based on their

ODP, moving from a higher ODP chemical to a lower ODP chemical would result in more allowances for the lower ODP chemical and an equal environmental footprint.

Further, if EPA were to allocate allowances for the next regulatory period taking inter-pollutant transfers into account, those transfers would only affect aggregate company baselines in specific chemicals, not the total amount allocated. In the case of the 2011 Interim Final Rule, when EPA updated baselines to include past inter-pollutant transfers, there was no environmental benefit to doing so. The way EPA allocates allowances relies on the estimate of market servicing need for a chemical and then divides that amount up proportionally based on a company's baseline allowances for that particular chemical (see section IV of this preamble for the detailed description). While taking baseline inter-pollutant transfers into account may have tremendous benefits for the company making the transfers, it does nothing for the environment. As described above, EPA sees this use of inter-pollutant transfers as manipulating the system, and is clarifying that baseline inter-pollutant transfers will not be allowed in the future.

Two commenters state that modifying the baselines by taking into account inter-pollutant transfers is contrary to the CAA. They argue that section 607 of the CAA allows EPA to approve inter-pollutant transfers of allowances only on a year-to-year basis, and point to language in section 607(b) stating that EPA regulations are to permit "a production allowance for a substance for any year to be transferred for a production allowance for another substance for the same year on an ozone depletion weighted basis." Similar arguments were made in comments submitted on the 2008 Proposed Rule and on the 2011 Interim Final Rule.

EPA does not agree with the comment that the language of section 607(b) is clear on its face. The statutory language is ambiguous, and EPA has discretion to choose a reasonable interpretation of that language. EPA determined in the 2009 Final Rule that section 607(b) is best read as permitting only year-by-year inter-pollutant transfers. EPA continues to believe that this is the best interpretation of the statutory language. Section 607(b) states that EPA's rules are to

permit “a production allowance for a substance for any year to be transferred for a production allowance for another substance for the same year.” This language emphasizes the year-by-year nature of such transactions. No parallel language appears in section 607(c). That section does, however, provide that any inter-pollutant transfers between two or more persons must meet the requirements of section 607(b).

As the Court noted, “the agency is certainly entitled to . . . institute a program that forbids baseline inter-pollutant transfers in the future,” (*Arkema v. EPA*, 618 F.3d at 9). Hence, EPA concludes that requiring all inter-pollutant transfers to be conducted on a yearly – and thus temporary – basis going forward is the approach most consistent with the wording of section 607(b). Further discussion of the reasons for limiting inter-pollutant transfers to those conducted on a calendar-year basis is available in the Response to Comments for the 2009 Final Rule (included in the docket for this rulemaking).

Consistent with the Court’s decision regarding *past* inter-pollutant transfers (those conducted during the prior regulatory period), the baselines established in this action for 2012-2014 take into account the 2008 inter-pollutant baseline transfers. EPA is clarifying, however, that it has not approved any inter-pollutant transfers of baseline allowances in the current regulatory period, and for the reasons given in the 2009 Final Rule, the 2011 Interim Final Rule, and in this action, in the future, EPA will approve inter-pollutant transfers only on a year-by-year basis. Thus, in the context of the allowance system for protection of stratospheric ozone, companies should not expect that any future inter-pollutant transfers they conduct will affect their baselines either in the current regulatory period or any future regulatory period.

EPA is revising the regulations to avoid any further dispute about the agency’s position on this issue. The new language clarifies that permanent inter-pollutant transfers of baseline allowances will not be approved. In addition, EPA is clarifying that the procedures in section 82.23(a) apply to permanent, single-pollutant transfers.

B. How Is EPA Changing the Regulations Governing Transfers of Article 5 Class II Allowances?

Article 5 allowances for Class II substances are the privileges granted under 40 CFR 82.18(a) to produce the specified HCFC for export only to countries listed in 40 CFR Subpart A, Appendix C, Annex 4. The countries listed in that annex are developing countries whose control obligations under the Montreal Protocol are addressed in Article 5 of the treaty and hence are referred to as “Article 5 Parties.” EPA proposed to revise the regulations at 40 CFR 82.23(b) to reflect its previously stated intent to allow inter-pollutant transfers of Article 5 allowances.

EPA promulgated section 82.23 as part of the 2003 Final Rule (68 FR 2820). EPA specifically discussed the inter-pollutant transfer of Article 5 allowances at 68 FR 2834 stating, “For example, after the 2003 phaseout of HCFC-141b and before 2010, a company receiving...Article 5 allowances for HCFC-141b could engage in inter-company transfers of those allowances, but not in inter-pollutant transfers [because no other HCFC Article 5 allowances would be available during that period]. In 2010, when...Article 5 allowances for HCFC-22 and HCFC-142b become available, these allowances will be transferable with the ones for HCFC-141b.” These statements indicate that the agency intended for companies to be able to perform inter-pollutant transfers of Article 5 allowances. The omission of Article 5 allowances from section 82.23(b) appears to have been an oversight. Therefore, EPA proposed to revise the regulations to specifically provide for the inter-pollutant transfers of Article 5 allowances through this rulemaking. As with other types of inter-pollutant transfers, these transfers would be limited in duration to a single year. The agency received two comments on its proposal to revise the text at section 82.23(b), which EPA responds to in the Response to Comments.

EPA also proposed to change the text at 82.23(a)(ii) for consistency with its previously stated policy on offsets for transfers of Article 5 allowances. Section 607(a) requires that transfers of production allowances “will result in greater total reductions in the production in

each year of...class II substances than would occur in that year in the absence of such transactions.” In a November 10, 1994, Federal Register notice, EPA stated its interpretation that the section 607 offset requirement applies to Article 5 allowance transfers (59 FR 56287): “Inter-pollutant transfers of Article 5 allowances will continue to require a one percent offset, as required by section 607 of the CAA...” In the May 10, 1995, final rule at 60 FR 24980, EPA stated that “[w]ith today's action, EPA permits inter-pollutant and inter-company transfers of Article 5 allowances as proposed...” meaning, EPA intended to require an offset for transfers of Article 5 allowances in the class I allowance system.

This intent to require an offset is also reflected in certain provisions of the class II allowance system in 40 CFR part 82. Section 82.23(a)(i)(G) specifically requires an offset for Article 5 allowance inter-company transfers, stating that the transfer claim must set forth: “For trades of consumption allowances, production allowances, export production allowances, or Article 5 allowances, the quantity of the 0.1 percent offset applied to the unweighted quantity traded that will be deducted from the transferor's allowance balance.” The offset is also mentioned at section 82.23(a)(iii): “In the case of transfers of...Article 5 allowances, EPA will reduce the transferor's balance of unexpended allowances by the quantity (in kilograms) to be converted plus 0.1 percent of that quantity.” This contrasts with section 82.23(a)(ii)(A), which states that in the case of Article 5 allowances, “EPA will reduce the transferor’s balance of unexpended allowances...by the quantity to be transferred,” with no mention of an offset. In addition, in the introductory text for 82.23(a)(ii), Article 5 allowances are not mentioned: “The transfer claim is the quantity (in kilograms) to be transferred plus, in the case of transfers of production or consumption allowances, 0.1 percent of that quantity;” EPA proposed to amend 82.23(a)(ii) and 82.23(a)(ii)(A) to require an offset for transfers of Article 5 allowances. EPA did not receive comments on this proposed clarification to the regulatory text, and is finalizing the clarification as proposed. Section 82.23(a) is now consistent throughout. Section 82.23(b)

requires an offset of 0.1 percent for all inter-pollutant transfers and since EPA is adding Article 5 allowances to section 82.23(b), an offset will automatically apply.

To reflect EPA's intent to allow inter-pollutant transfers of Article 5 allowances, and the requirement that an offset be deducted when an entity is transferring Article 5 allowances, the agency is finalizing the proposed modifications to the regulatory text at 40 CFR 82.23(a)(ii), 82.23(a)(ii)(A), and 82.23(b).

VI. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

Under Executive Order (EO) 12866 (58 FR 51735, October 4, 1993), this action is a "significant regulatory action" since it raises "novel legal or policy issues." Accordingly, EPA submitted this action to the Office of Management and Budget (OMB) for review under Executive Orders 12866 and 13563 (76 FR 3821, January 21, 2011) and any changes made in response to OMB recommendations have been documented in the docket for this action.

EPA did not conduct a specific analysis of the benefits and costs associated with this action. Many previous analyses provide a wealth of information on the costs and benefits of the U.S. HCFC phaseout including:

- The 1993 *Addendum to the 1992 Phaseout Regulatory Impact Analysis: Accelerating the Phaseout of CFCs, Halons, Methyl Chloroform, Carbon Tetrachloride, and HCFCs*.
- The 1999 Report *Costs and Benefits of the HCFC Allowance Allocation System*.
- The 2000 Memorandum *Cost/Benefit Comparison of the HCFC Allowance Allocation System*.
- The 2005 Memorandum *Recommended Scenarios for HCFC Phaseout Costs Estimation*.
- The 2006 ICR *Reporting and Recordkeeping Requirements of the HCFC Allowance System*.

- The 2007 Memorandum *Preliminary Estimates of the Incremental Cost of the HCFC Phaseout in Article 5 Countries*.
- The 2007 Memorandum *Revised Ozone and Climate Benefits Associated with the 2010 HCFC Production and Consumption Stepwise Reductions and a Ban on HCFC Pre-charged Imports*.
- The 2009 ICR *Reporting and Recordkeeping Requirements of the HCFC Allowance System*.

A memorandum summarizing these analyses is available in the docket.

B. Paperwork Reduction Act

This action does not impose any new information collection burden. EPA already requires recordkeeping and reporting for HCFCs, and this action does not amend those provisions. The Office of Management and Budget (OMB) has previously approved the information collection requirements contained in the existing regulations at 40 CFR part 82, subpart A under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. and has assigned OMB control number 2060-0498. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice-and-comment rulemaking requirements under the Administrative Procedure Act or any other statute, unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions. We have considered the economic impacts of this final rule on small entities. For purposes of assessing the impacts of this rule on small entities, a small entity is defined as: (1) a small business as defined by the Small Business Administration's (SBA)

regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

This action may affect the following categories:

- Industrial Gas Manufacturing entities (NAICS code 325120), including fluorinated hydrocarbon gases manufacturers and reclaimers;
- Other Chemical and Allied Products Merchant Wholesalers (NAICS code 422690), including chemical gases and compressed gases merchant wholesalers;
- Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing entities (NAICS code 333415), including air-conditioning equipment and commercial and industrial refrigeration equipment manufacturers;
- Air-Conditioning Equipment and Supplies Merchant Wholesalers (NAICS code 423730) , including air-conditioning (condensing unit, compressors) merchant wholesalers;
- Electrical and Electronic Appliance, Television, and Radio Set Merchant Wholesalers (NAICS code 423620), including air-conditioning (room units) merchant wholesalers; and
- Plumbing, Heating, and Air-Conditioning Contractors (NAICS code 238220), including central air-conditioning system and commercial refrigeration installation; HVAC contractors.

After considering the economic impacts of this final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities.

In determining whether a rule has a significant economic impact on a substantial number of small entities, the impact of concern is any significant adverse economic impact on small entities, since the primary purpose of the regulatory flexibility analyses is to identify and address regulatory alternatives “which minimize any significant economic impact of the rule on small entities.” 5 USC 603 and 604. Thus, an agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, or otherwise has a positive economic effect on all of the small entities subject to the rule.

This rule relieves a regulatory ban on production and consumption that would otherwise apply in the wake of the Court’s vacatur. Additionally, EPA is continuing to allocate production and consumption allowances using the same approach described in the 2009 Final Rule with adjustments to reflect (1) 2008 inter-pollutant transfers of baseline allowances deemed permanent by the Court, (2) inter-company, single-pollutant transfers of baseline allowances that occurred in 2010, (3) changes in company names that occurred after the 2009 Final Rule was signed and (4) an updated picture on the need for virgin HCFC-22 as assessed in the Adjustment Memo and sections IV.B.1-3 of this preamble. EPA is not modifying the recordkeeping or reporting provisions and thus is not increasing the burden to small businesses. EPA’s HCFC Phaseout Benefits and Costs Memo, included in this docket, provides a summary of previous small business analyses, as well as the cost and benefit data used for the 2009 Final Rule.

We have therefore concluded that today's final rule will relieve regulatory burden for all affected small entities.

D. Unfunded Mandates Reform Act

This action contains no Federal mandates under the provisions of Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), 2 U.S.C. 1531-1538 for State, local, or tribal governments or the private sector. UMRA does not apply to rules that are necessary for the ratification or implementation of international treaty obligations. This rule implements the 2010

milestone for the phase-out of HCFCs under the Montreal Protocol. Therefore, this action is not subject to the requirements of sections 202 or 205 of UMRA.

This action is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments. This action apportions production and consumption allowances and establishes baselines for private entities, not small governments.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. This action is expected to primarily affect producers, importers, and exporters of HCFCs. Thus, Executive Order 13132 does not apply to this action.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). This action does not significantly or uniquely affect the communities of Indian tribal governments. It does not impose any enforceable duties on communities of Indian tribal governments. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children from Environmental Health and Safety Risks

This action is not subject to EO 13045 (62 F.R. 19885, April 23, 1997) because it is not economically significant as defined in EO 12866. The agency nonetheless has reason to believe that the environmental health or safety risk addressed by this action may have a disproportionate effect on children. Depletion of stratospheric ozone results in greater transmission of the sun's ultraviolet (UV) radiation to the earth's surface. The following studies describe the effects of

excessive exposure to UV radiation on children: (1) Westerdahl J, Olsson H, Ingvar C. “At what age do sunburn episodes play a crucial role for the development of malignant melanoma,” *Eur J Cancer* 1994; 30A: 1647-54; (2) Elwood JM Japson J. “Melanoma and sun exposure: an overview of published studies,” *Int J Cancer* 1997; 73:198-203; (3) Armstrong BK, “Melanoma: childhood or lifelong sun exposure,” In: Grobb JJ, Stern RS Mackie RM, Weinstock WA, eds. “Epidemiology, causes and prevention of skin diseases,” 1st ed. London, England: Blackwell Science, 1997: 63-6; (4) Whiteman D., Green A. “Melanoma and Sunburn,” *Cancer Causes Control*, 1994: 5:564-72; (5) Heenan, PJ. “Does intermittent sun exposure cause basal cell carcinoma? A case control study in Western Australia,” *Int J Cancer* 1995; 60: 489-94; (6) Gallagher, RP, Hill, GB, Bajdik, CD, et. al. “Sunlight exposure, pigmentary factors, and risk of nonmelanocytic skin cancer I, Basal cell carcinoma,” *Arch Dermatol* 1995; 131: 157-63; (7) Armstrong, DK. “How sun exposure causes skin cancer: an epidemiological perspective,” *Prevention of Skin Cancer*. 2004. 89-116.

This action implements the U.S. commitment to reduce the total basket of HCFCs produced and imported to 25 percent of the respective baselines. While on an ODP-weighted basis, this is not as large a step as previous actions, such as the 1996 Class I phaseout, it is one of the most significant remaining actions the U.S. can take to complete the overall phaseout of ODS and further decrease impacts on children’s health from stratospheric ozone depletion.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not a “significant energy action” as defined in Executive Order 13211 (66 FR 28355 (May 22, 2001)), because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The rule issues allowances for the production and consumption of HCFCs.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 ("NTTAA"), Public Law No. 104-113, 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. NTTAA directs EPA to provide Congress, through OMB, explanations when the agency decides not to use available and applicable voluntary consensus standards. This action does not involve technical standards. Therefore, EPA did not consider the use of any voluntary consensus standards.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order (EO) 12898 (59 FR 7629 (Feb. 16, 1994)) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

EPA has determined that this action will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population. This action continues the implementation of the U.S. commitment to reduce the total basket of HCFCs produced and imported to a level that

is more than 75 percent below the respective baselines. While on an ODP-weighted basis, this is not as large a step as previous actions, such as the 1996 Class I phaseout, it is one of the most significant remaining actions the U.S. can take to complete the overall phaseout of ODS and further lessen the adverse human health effects for the entire population.

K. The Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the U.S. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the U.S. prior to publication of the rule in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a “major rule” as defined by 5 U.S.C. 804(2). This rule will be effective **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

List of Subjects in 40 CFR Part 82

Environmental protection, Administrative practice and procedure, Air pollution control, Chemicals, Exports, Hydrochlorofluorocarbons, Imports

DATED: March 27, 2013

Bob Perciasepe,

Acting Administrator.

40 CFR part 82 is amended as follows:

PART 82-PROTECTION OF STRATOSPHERIC OZONE

1. The authority citation for part 82 continues to read as follows:

Authority: 42 U.S.C. 7414, 7601, 7671– 7671q.

2. Amend §82.16 by revising paragraph (a) to read as follows:

§82.16 Phaseout schedule of class II controlled substances.

- (a) *Calendar-year allowances.* (1) In each control period as indicated in the following tables, each person is granted the specified percentage of baseline production allowances and baseline consumption allowances for the specified class II controlled substances apportioned under §§82.17 and 82.19:

Calendar-year HCFC Production Allowances

Control Period	Percent of HCFC-141b	Percent of HCFC-22	Percent of HCFC-142b	Percent of HCFC-123	Percent of HCFC-124	Percent of HCFC-225ca	Percent of HCFC-225cb
2003	0	100	100	--	--	--	--
2004	0	100	100	--	--	--	--
2005	0	100	100	--	--	--	--
2006	0	100	100	--	--	--	--
2007	0	100	100	--	--	--	--
2008	0	100	100	--	--	--	--
2009	0	100	100	--	--	--	--
2010	0	41.9	0.47	125	125	125	125
2011	0	32.0	4.9	125	125	125	125
2012	0	17.7	4.9	125	125	125	125

2013	0	30.1	4.9	125	125	125	125
2014	0	26.1	4.9	125	125	125	125

Calendar-year HCFC Consumption Allowances

Control Period	Percent of HCFC-141b	Percent of HCFC-22	Percent of HCFC-142b	Percent of HCFC-123	Percent of HCFC-124	Percent of HCFC-225ca	Percent of HCFC-225cb
2003	0	100	100	--	--	--	--
2004	0	100	100	--	--	--	--
2005	0	100	100	--	--	--	--
2006	0	100	100	--	--	--	--
2007	0	100	100	--	--	--	--
2008	0	100	100	--	--	--	--
2009	0	100	100	--	--	--	--
2010	0	41.9	0.47	125	125	125	125
2011	0	32.0	4.9	125	125	125	125
2012	0	17.7	4.9	125	125	125	125
2013	0	18.0	4.9	125	125	125	125
2014	0	14.2	4.9	125	125	125	125

(2) *Recoupment allowances.* In the control period beginning January 1, 2013 and ending December 31, 2013, and again in the control period beginning January 1, 2014 and ending December 31, 2014, certain companies are granted HCFC consumption and production allowances in addition to the percentage of baseline listed in the table at paragraph (a)(1) of this section. The following companies will receive the amounts listed below in both 2013 and 2014:

2,374,846 kg of HCFC-22 consumption allowances and 2,305,924 kg of HCFC-22 production allowances to Arkema; 1,170 kg of HCFC-142b consumption allowances to DuPont; 29,146 kg of HCFC-142b consumption allowances and 53,549 kg of HCFC-142b production allowances to Honeywell; 578,948 kg of HCFC-22 consumption allowances to Solvay Fluorides; and 144,900 kg of HCFC-142b production allowances to Solvay Solexis.

* * * * *

3. Amend §82.23 by revising paragraphs (a)(ii) introductory text, (a)(ii)(A), (b)(1), and (d) to read as follows:

§82.23 Transfers of allowances of class II controlled substances.

(a) * * * (ii) The Administrator will determine whether the records maintained by EPA indicate that the transferor possesses unexpended allowances sufficient to cover the transfer claim on the date the transfer claim is processed. The transfer claim is the quantity (in kilograms) to be transferred plus 0.1 percent of that quantity. The Administrator will take into account any previous transfers, any production, and allowable imports and exports of class II controlled substances reported by the transferor. Within three working days of receiving a complete transfer claim, the Administrator will take action to notify the transferor and transferee as follows:

(A) The Administrator will issue a notice indicating that EPA does not object to the transfer if EPA's records show that the transferor has sufficient unexpended allowances to cover the transfer claim. In the case of transfers of production or consumption allowances, EPA will reduce the transferor's balance of unexpended allowances by the quantity to be transferred plus 0.1 percent of that quantity. In the case of transfers of export production or Article 5 allowances, EPA will reduce the transferor's balance of unexpended allowances, respectively, by the quantity to be transferred plus 0.1 percent of that quantity. The transferor and the transferee may proceed with the transfer when EPA issues a no objection notice. However, if EPA ultimately finds that

the transferor did not have sufficient unexpended allowances to cover the claim, the transferor and transferee, where applicable, will be held liable for any knowing violations of the regulations of this subpart that occur as a result of, or in conjunction with, the improper transfer.

* * * * *

(b) * * * (1) Effective January 1, 2003, a person (transferor) may convert consumption allowances, production allowances or Article 5 allowances for one class II controlled substance to the same type of allowance for another class II controlled substance listed in Appendix B of this subpart, following the procedures described in paragraph (b)(3) of this section.

* * * * *

(d) *Permanent transfers.* The procedures in paragraph (a) of this section apply to permanent inter-company transfers of baseline production allowances or baseline consumption allowances. A person receiving a permanent transfer of baseline production allowances or baseline consumption allowances (the transferee) for a specific class II controlled substance will be the person who has their baseline allowances adjusted in accordance with phaseout schedules in this subpart. No person may conduct permanent inter-pollutant transfers of baseline production allowances or baseline consumption allowances.

[FR Doc. 2013-07758 Filed 04/02/2013 at 8:45 am; Publication Date: 04/03/2013]